GENERAL ZOOLOGY

or

SYSTEMATIC NATURAL HISTORY

commenced by the late

GEORGE SHAW, M.D. F.R.S. &c.

WITH PLATES

from the first Authorities and most select specimens

Engraved principally by

Mrs GRIFFITH.

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GENERAL ZOOLOGY.

VOLUME XII.——PART II.

BY

JAMES FRANCIS STEPHENS, F.L.S. &c.

BIRDS

LONDON:

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Directions for placing the Plates to Vol. XII. Part II.

The Vignette represents the *New Holland Lobeduck,* described in page 222.

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ERRATA.

Page 37, line 20, *for* Beringii *read* Beeringii.
— 45, — 22, *for* ANSER *read* ANSER, Becks.
— 49, — 1, *for* BERNCLE *read* BERNICLE.
— 114, — 1, *for* HYNCHASPIS *read* RHYNCHASPIS.
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BIRDS

ORDER

NATATORES.

Rostrum *diversum.*
Pedes *breves, in equilibrio, aut ad apicem corporis inserti;* tibiæ *imæ plus minusve nudæ;* digiti *omnes, aut antici soli, toti vel semipalmati;* ungues *breves aut mediocres, compressi aut depressi.*
Beak various.
Legs short, inserted in the equilibrium, or at the tip of the body; *tibiæ* more or less naked at the lower part; *toes,* all, or the anterior only, entirely or half-webbed; *claws* short, or moderate, compressed or depressed.

ALL the Birds belonging to this order have their feet formed for swimming, and they are usually placed very backward on the body; in some genera at the extremity itself; the tarsi are generally short and compressed, and the toes are more or less webbed; and in a few of the genera all of them are united by a membrane: in others, the anterior toes alone are furnished with that appendage. Their plumage is generally very downy, thick, and glossy, and is mostly saturated with an oily matter, deposited on the feathers, from two glands situated at the extremity of

the body, for the purpose of protecting the animals from the effects of the water, upon which they usually reside. Most of the species frequent the sea or its coasts: they feed on fish, their fry, insects, vermes, marine crustacea, or mollusca.

The Natatores may be readily arranged, in accordance with the quinary and circular distribution of animals, detected and so ably illustrated by the learned author of Horæ Entomologicæ, into the following groups or *families*, viz.

Legs placed	behind the equilibrium of the body; *wings* short:	*beak*	slightly compressed:			. . . COLYMBIDÆ.
			greatly compressed:			. . . ALCADÆ.
	in, or near, the equilibrium; *wings* long:	*toes*	all united by a membrane:			. . . PELECANIDÆ.
			three anterior only united:	*beak*	simple:	LARIDÆ.
					dentated:	ANATIDÆ.

The above arrangement of the two great divisions, which may be termed *tribes*, is apparently consonant to nature, and the circle returns into itself by means of certain Ducks that approximate in their structure towards the Divers. The birds of the first *tribe* are almost exclusively pelagic, and use their short wings as fins in swimming or diving, at which they are very expert: those of the second gradually recede from the typical form, become less pelagic, more capable of walking, from the forward position of their legs, and possess greater powers of flight; while, on the other hand, these faculties are gradually lost as we pass on through

the last family, the terminal genera of which affect more pelagic situations, walk and fly awkwardly, but dive admirably.

As it is not intended to enter into a discussion of the merits of the above system, the truth of which there can be no reason to doubt, *when properly investigated,* I shall proceed to the description of the species of that *family* which more immediately connects itself with the preceding order.

ANATIDÆ.

THE birds of this family have the beak very stout and covered with a soft membranous skin; its edge is either armed with laminæ, or with small denticulations: it is more or less depressed, and its base is often furnished with a fleshy protuberance: towards the tip it is depressed, rounded, and obtuse; the tip itself armed with a nail. The nostrils are near the surface of the beak, at some distance from the base, oval, and half closed by a flat membrane, which covers the nasal channel. The legs are short, naked a little above the knee, and placed deeply in the abdomen: the toes are four in number, of which three are placed forwards and webbed; the hinder one is free, and placed higher up on the tarsi than the others, and is in some genera furnished with a lobated appendage. The wings are of medial length. The structure of the trachea is very extraordinary in several of the

genera, which will be pointed out in the description of the species as they come in rotation; it need only be remarked here that the male usually furnishes us with such construction: which is simple in the two first *stirpes* of this family, as subsequently divided, and, more or less, complex in the remaining three. It may, nevertheless, be added, that those Ducks with a simple hind toe possess a less complicated structure of this organ than the Mergansers, or the Diving Ducks with short wings; and that, as far as experience teaches us, the variations of form to which this part is subject are consistent with the habits of the birds to which it appertains.

The greater portion of the species prefer the fresh water of lakes and rivers; others, and more especially those that are furnished with the lobated hind toe, affect brackish water and the sea-coasts. They usually swim with great facility and much grace, many of them plunging their heads under water, when searching for their prey, while others submerge their entire body at such times, and continue for a long period beneath the surface of the water: they walk in a vacillating and embarrassed manner, those (as before observed) with the lobated hind toe walking most awkwardly, from having their legs placed more backward on the body. These birds moult twice in the year, and their feathers are of great utility to man, as is the flesh of many of the species: their usual subsistence consists of fishes, insects, vermes, mollusca, vegetables, and seeds.

There appear, as usual in all extensive groups to be five types of form (which may be denominated

stirpes) among the birds of this family; the first comprising the Swans and Geese; the second, the singular New Holland genus Cereopsis of Latham; the third, the true Ducks; the fourth, the Mergansers; and the last, those Ducks with short wings and a lobated hind toe. As I have not had an opportunity of examining many specimens, and have been compelled, from the lamentable want of any public or other extensive zoological collection in this country, to confine my observations to the descriptions of Latham and others, who, in most instances, describe only the feathers of birds, I do not give the above as a perfect natural distribution of this family, but as an approximation thereto; my chief object being to stimulate others, who have not only better opportunities and more leisure to investigate the subject and lay their observations before the public, but are at the same time zealous in promoting the cause of science, and in contributing towards the increase of our ornithological knowledge.

STIRPS 1.

Rostrum *basi altiùs quam latum;* tarsi *elongati;* trachea *simplex.*
Beak higher than broad at the base; *tarsi* elongated; *trachea* simple.

PLECTROPTERUS. PLECTROPTERUS.

Generic Character.

Rostrum subcylindricum, basi tuberculo carneo instructum, laminato-dentatum, obtusum.	*Beak* subcylindric, furnished with a fleshy tubercle at its base, its sides dentated in laminæ, obtuse.
Nares in medio rostri sitæ.	*Nostrils* placed in the middle of the beak.
Alæ calcaria dua armatæ.	*Wings* armed with spurs.
Collum breve.	*Neck* short.
Pedes tetradactyli; *digiti* anteriores toti palmati; *pollex* simplex.	*Legs* four-toed; three *anterior toes* entirely webbed; the *hinder toe* simple.

PLECTROPTERUS. Leach MSS.
ANAS. Linn., Gmel., Lath., &c.
ANSER. Penn.
CYGNUS. Cuvier.

CUVIER says of this genus that it differs from the true Swans by its form, the height of its legs, and by the tubercle which it bears on the beak; to which he adds, that the bend of the wing is armed with two strong spurs. There are but two species known; and of their manners we are ignorant.

GAMBIA PLECTROPTERUS.

GAMBIA PLECTROPTERUS.

(Plectropterus Gambensis.)

Pl. *corpore nigro, subtus albo, dorso purpurascente, rostro pedibusque rubris.*

Plectropterus with the body black, beneath white, the back purplish, the beak and legs red.

Anas Gambensis. *Linn. Syst. Nat.* 1. 195. *Gmel. Syst. Nat.* 1. 503. *Raii, Syn.* 138. *Lath. Ind. Orn.* 2. 839.

L'Oie de Gambie. *Cuv. Reg. Anim.* 1. 530.

Spur-winged Goose. *Lath. Gen. Syn.* 6. 452. *pl.* 102.

Size of the Wild Goose: its beak is upwards of two inches long, and red: the cheeks and chin are white: the neck, sides of the breast, the back, rump, and tail black, with a purple gloss on the back: the outer wing-coverts, inner ridge and bend of the wing, the middle of the breast, and all the under parts white: the spurs of the wing horn-coloured; the rest of the wing purplish-black: the legs red. Inhabits Gambia and other parts of Africa.

The specimen from whence the accompanying figure was taken is apparently a young bird, as Cuvier says that this species has two spurs on the bend of the wing, and a large knob at the base of the beak.

BLACK-BACKED PLECTROPTERUS.

(Plectropterus melanotos.)

Pl. *corpore albo, capite colloque nigro maculatis, dorso alis caudâque nigris.*

Plectropterus with the body white, the head and neck spotted with black, the back and wings black.

Anser melanotos. *Zool. Ind.* 21. *pl.* 11.

Anas melanotos. *Gmel. Syst. Nat.* 1. 503. *Lath. Ind. Orn.* 2. 839.

L'Oie bronzée de Coromandel. *Buff. Hist. Nat. Ois.* 9. 77. *Buff. Pl. Enl.* 937.

Black-backed Goose. *Lath. Gen. Syn.* 6. 449. *Lath. Syn. Sup.* 272.

Size of the last: length two feet nine inches: beak pale: the head and half the neck white, spotted and slightly streaked with black: the rest of the neck and the under parts of the plumage are white, with the sides tinged with grey: the back, wings, and tail are black, glossed with green and purplish reflections, particularly in the male: the legs are dusky. Common in the island of Ceylon, and the coast of Coromandel, and also in the vicinity of the Ganges.

CYGNUS. SWAN.

Generic Character.

Rostrum basi tuberculo carneo tumido instructum, supra subcylindricum, laminato-dentatum, obtusum; mandibulâ superiore unguiculatâ et ad apicem incurvam, inferiore planâ.
Nares in medio rostri sitæ.

Collum longissimum.
Pedes ex equilibrio corporis positæ, tetradactyli; *digiti* anteriores toti palmati; *pollex* simplex.

Beak furnished with a tumid fleshy tubercle at its base, above subcylindric laminato-dentate, obtuse; the upper mandible hooked and incurved at its tip; the lower flat.
Nostrils placed in the middle of the beak.
Neck very long.
Legs placed out of the equilibrium of the body; four-toed; the *anterior toes* entirely webbed; the *hinder toe* simple.

CYGNUS. Ray, Briss., Cuv.
ANAS. Linn., Gmel., Lath.

SWANS are well known from their superior size, being generally the largest birds of this family: their beak is as broad towards the tip as at its base, which is usually higher than broad; the nostrils are placed near the middle of the beak, and the neck is greatly

elongated. They subsist chiefly on seeds, roots, and aquatic plants. Their manners are graceful and elegant, and they form a principal ornament in many of our parks and rivers.

WHISTLING SWAN.

(Cygnus ferus.)

Cy. *rostro semicylindrico atro, cerâ flavâ, corpore albo.*

Swan with a semicylindric dark-coloured beak, yellow cere, and white body.

Cygnus ferus. *Raii, Syn.* 136. *A.* *Briss. Orn.* 6. 292. *pl.* 28.

Anas Cygnus (ferus). *Linn. Syst. Nat.* 1. 194.

Anas Cygnus. *Gmel. Syst. Nat.* 1. 501. *Lath. Ind. Orn.* 2. 833.

Cygne sauvage. *Buff. Hist. Nat. Ois.* 9. 3. *Buff. Pl. Enl.*

Cygne à bec jaune, ou sauvage. *Temm. man. d'Orn.* 522. *Id.* 2 *Edit.* ii. 828.

Le Cigne à bec noire. *Cuv. Reg. Anim.* 1. 529.

Wild Swan. *Penn. Brit. Zool.* 2. 264. *Edw. Glean. pl.* 150.

Whistling Swan. *Penn. Arct. Zool.* 2. 469. *Lath. Gen. Syn.* 6. 433. *Lath. Syn. Sup.* 272. *Syn. Sup.* ii. 341. *Lew. Brit. Birds,* 6. *pl.* 236. *Walc. Syn.* 1. *pl.* 55. *Mont. Orn. Dict.* 1. *and Sup.* *Bew. Brit. Birds,* 2. 272. *Linn. Trans.* 10. 105. *pl.* 12. *f.* 12. (*trachea.*) *Bingl. Anim. Biog.* ii. 319.

The Whistling Swan is nearly five feet in length: its beak is black, covered at its base by a yellow cere, which is continued backwards, and surrounds the eyes: the irides are brown: the entire plumage is of a perfect white, except the head and nape, which are very slightly shaded with yellowish: the legs are

WHISTLING SWAN.

black. The female merely differs in being somewhat smaller. The young have all the plumage of a clear grey: the fore part of the beak of a dull black: the cere and the naked skin round the eyes of a livid flesh colour: the legs of a reddish-grey: at the second moult the plumage becomes mottled with white.

The sternum of this bird is large and hollow; the arterial trachea forms two circumvolutions previous to its entrance therein.

Wild Swans inhabit the regions of the Arctic Circle, and scarcely appear southward, except in severe winters, when they are sometimes found in Holland, France, and in this country, but more rarely in the interior of the Continent. They are, however, often observed in great numbers in some of the Western Islands about October, where they remain till March, retiring northward to breed, though a few continue in the Orkneys, and breed in the fresh water lochs. The female lays from five to seven eggs, of an olive-green or whitish colour, placed in a nest composed of withered leaves and stalks of reeds and rushes: she is said to sit upon them six weeks before they are hatched: both sexes are very attentive to their young, and will suffer no enemy to approach them.

Much has been said of the singing of the Swan, and many beautiful and poetical descriptions have been given of its dying song: no fiction of natural history, no fable of antiquity, was ever more celebrated, oftener repeated, or better received: it occupied the soft and lively imagination of poets, orators, and even of philosophers, who adopted it as a truth too pleasing to be doubted. The truth, however, is

very different from such amiable and affecting fables, for the voice of this bird is very loud, shrill, and harsh, resembling the sound *whoogh, whoogh*, or the disagreeable tone of a clarionet when blown by a novice. When high in the air, and modulated by the winds, however, the notes of an assemblage of them are not unpleasant. The Icelanders compare it to the notes of the violin: they hear it at the end of their long and gloomy winter, when the return of the Swan announces also the return of summer; every sound, therefore, must be to them melodious which presages a speedy thaw, and a release from their tedious confinement.

Equally absurd stories have also been invented and often repeated of the great strength of the wing of these birds, and how dangerous it is to approach their nests, as a blow from the wing, it is asserted, will break a man's thigh. "It is high time," Montagu says, "such absurdities should be erased in this philosophic age, and that the mind of man should reason before he continues to relate such accounts, only calculated to frighten children. Let the bones of the wing of the Swan be examined, and compared with the thigh of a man, or even of his arm, and it will be evident that it would be as impossible for a Swan to break a man's arms as it would be to break his head with a reed. The bone of a man's arm would bear a pressure fifty times as great as the bone of a Swan's wing; how, then, is the inferior in size and strength to break the superior without, at least, being itself fractured? It should also be recollected, that a bird is incapable of striking with any degree of

force while all his quill-feathers are perfect, the resistance of the air against such a surface being too great to allow of its moving with sufficient velocity to inflict any sensible pain."

Swans are very active, and in Iceland they are an object of chase. In the month of August they lose their feathers to such a degree as to be incapable of flying. The natives, at that season, resort in great numbers to the places where they most abound, and are accompanied with dogs, and active, strong horses, trained to the sport, and capable of passing nimbly over the boggy soil and marshes: the greater number of the birds are caught by the dogs, which are taught to seize them by the neck, a mode of attack that causes them to lose their balance, and become an easy prey. When in full plumage, Swans are so extremely swift on the wing as to make them more difficult to shoot than almost any other birds; it being frequently necessary to aim ten or a dozen feet before their beaks: when flying before the wind in a brisk gale, they are said to proceed at a rate of nearly a hundred miles an hour! but when flying across the wind or against it, they are not able to make any great progress.

These birds are highly useful to man, their flesh and eggs being greatly esteemed by the natives of the northern regions of Asia and America: their skins are also prepared with the down on, sewn together, and made into various garments: the down is also preserved; and forms an article of commerce which is in great demand in this and various other European countries.

They bear confinement well, and will soon become very docile, as shown by the following anecdote from Montagu, respecting a female of this species which was shot near Bridgewater in 1805. "This beautiful and docile bird is now alive (1813), and in high health, living with many other sorts of Ducks in the greatest harmony. Towards the spring she becomes more clamorous, and impatient of confinement; but at all times will approach those persons in the habit of feeding her, and will take food from the hand, at the same time uttering those plaintive and harmonious notes for which the species have been remarkable, and which are attended with a singular jerk of the head. She usually carries her neck straight and erect, either upon the water, or when stationary on land; but in walking, the head is lowered, and the neck reclining over the back. In the season of love she frequently flaps along the surface of the water, and would undoubtedly fly, if the precaution of annually cutting the feathers of one wing was omitted. Her nature is gentle, timid, and sociable; will follow those with whom she is acquainted from one side of the menagerie to the other, especially ladies of the family dressed in white; is often turned out of her course by a pugnacious male Shieldrake, and acts only offensively when food is the object, and then only where resentment is not expected. She eats but little grass on land, but will devour aquatic plants occasionally; barley, however, is her principal food; and she never attempts to touch bread, which is sometimes thrown to other birds; nor will she devour small fish."

MUTE SWAN.

MUTE SWAN.

(Cygnus olor.)

Cy. *rostro rubro, basi tuberculo carnoso nigro, corpore toto albo.*
Swan with a red beak, its base with a fleshy, black tubercle, the body entirely white.

Anas Cygnus (mansuetus). *Linn. Syst. Nat.* 1. 194. *Raii, Syn.* 136. *A. Briss. Orn.* 6. 288.
Anas olor. *Gmel. Syst. Nat.* 1. 501. *Lath. Ind. Orn.* 2. 834.
Le Cygne. *Buff. Hist. Nat. Ois.* 9. 3. *pl.* 1. *Buff. Pl. Enl.* 913.
Cygne tuberculé, ou domestique. *Temm. man. d'Orn.* 523. *Id.* 2 *Edit.* ii. 830.
Le Cygne à bec rouge. *Cuv. Reg. Anim.* 1. 528.
Tame Swan. *Alb. Birds,* 3. *pl.* 96. *Edw. Glean. pl.* 150. *Penn. Brit. Zool.* 2. 265. *pl.* 60.
Mute Swan. *Penn. Arct. Zool.* 2. 470. *Lath. Gen. Syn.* 6. 436. *Lath. Syn. Sup.* ii. 342. *Bew. Brit. Birds,* 2. 277.

Rather less than the former: its beak is red, with the exception of the edges of the mandibles, the hook, the nostrils, the protuberance, and the space round the eyes, which are deep black: the irides are brown: the entire plumage is of a pure unsullied white: the legs are black, slightly shaded with reddish. The female is smaller, the rostral protuberance is less, and the neck more slender. The young of the year are of an ashy-brown, with the beak and the legs of a lead colour: in the second year the beak becomes yellowish, and the plumage is varied with white and grey; in the third year the plumage becomes perfectly white. There is not any remarkable particu-

larity in the form of the trachea of this species, which passes straight into the lungs.

The tame Swan is found, in its wild state, in the great seas of the interior of the eastern countries of Europe and of Asia; and domesticated, it occurs in almost every European country. In the river Thames they are in great plenty, where they are royal property, and it is felony to steal their eggs. At Abbotsbury, in Dorsetshire, there was formerly a noble swannery, the property of the Earl of Ilchester, where six or seven hundred birds were kept; but of late years this collection has been much diminished. In former times, and previously to the dissolution of monasteries, they frequently amounted to more than double the number.

Swans are supposed to live to a great age, but no satisfactory evidence has yet been brought forward to prove the assertion: they are strong and active birds, and will swim faster than a man can walk; and while their young are incapable of protecting themselves, they are at times extremely fierce, and have been known to throw down and trample upon youths of fifteen or sixteen years of age. It is related that a female, while in the act of sitting, observed a fox swimming towards her from the opposite shore; she instantly darted into the water, and having kept him at bay for a considerable time with her wings, at last succeeded in drowning him; after which, in the sight of several persons, she returned in triumph.

They make their nest of grass, among reeds; and in February begin to lay, depositing a white egg every other day till there are six or eight: they are

BLACK SWAN.

hatched in about seven or eight weeks. The young do not acquire their full plumage till the second year: during this period they are called cygnets, and in former times were much esteemed as food, though at present they are not in so much demand, although they are sometimes fattened for the table, and sold commonly for a guinea each, and sometimes for more. The flesh of the old birds is very hard and ill tasted.

Nothing can exceed the graceful and elegant appearance of these birds when gently sailing along on the glassy surface of the water, throwing themselves into the proudest attitudes imaginable before the spectators; but when kept out of the water and confined in a court-yard, they become dispirited, dirty, and awkward in their movements.

BLACK-NECKED SWAN.

(Cygnus nigricollis.)

Cy. *capite colloque nigris, corpore albo, rostro rubro.*
Swan with the head and neck black, the body white, the beak red.
Anas nigricollis. *Gmel. Syst. Nat.* 1. 502. *Lath. Ind. Orn.* 2. 834.
Anas melanocephalus. *Gmel. Syst. Nat.* 1. 502.
Black-necked Swan. *Lath. Gen. Syn.* 6. 438. *Lath. Syn. Sup.* ii. 344.

But little is known of this species, which in every respect appears to resemble the preceding bird, except

in having its beak red, the plumage of the head and neck of a velvet black, and its legs flesh-coloured.

It inhabits various parts of South America, but is most numerous among the Falkland Islands and the Straits of Magellan.

BLACK SWAN.

(Cygnus atratus.)

Cy. *rostro rubescente, corpore atro, margine alarum albo.*
Swan with a reddish beak, dark-coloured body, with the margin of the wing white.
Anas atrata. *Lath. Ind. Orn.* 2. 834.
Le Cigne noir. *Cuv. Reg. Anim.* 1. 529.
Anas plutonia. *Shaw, Nat. Misc. pl.* 108.
Black Swan. *Lath. Gen. Syn. Sup.* ii. 343.

Nearly the size of the Tame Swan: extent of wing, from the tip of one to that of the other, four feet eight inches: its beak is large and red, with its tip palest: at the base of its upper mandible, near the nostrils, is a bifid protuberance ; its under mandible is red on the sides and white beneath: the irides are red : the prevailing colour of the plumage is of a deep black, with all the primary quills, the greater part of the secondaries, and part of the wing-coverts white: the belly and thighs are cinereous: the legs brownish flesh-colour. The female is destitute of the basal protuberance on the beak.

This bird inhabits various parts of New Holland,

and is said to fly in small flocks of eight or nine each: its habits are but little known; but in a domesticated state their food is similar to that of the common species. It is frequently kept as an ornament in parks in this country, and several are on the estate of Lord Cowper at Panshanger, near Hertford. Its notes are represented as being particularly sweet and melodious, though not of long continuance.

CANADA SWAN.

(Cygnus Canadensis.)

Cy. *cinerea, capite colloque nigris, genis gulâque albis.*

Ash-coloured Swan with the head and neck black, the cheeks and throat white.

Anas Canadensis. *Linn. Syst. Nat.* 1. 198. *Gmel. Syst. Nat.* 1. 514. *Briss. Orn.* 6. 272. *pl.* 26. *Raii, Syn.* 39. *Lath. Ind. Orn.* 2. 838.

L'Oie à cravate. *Buff. Hist. Nat. Ois.* 9. 82. *Buff. Pl. Enl.* 346.

Canada Goose. *Penn. Arct. Zool.* 2. 471. *Cates. Carol.* 1. *pl.* 92. *Edw. Glean. pl.* 151. *Lath. Gen. Syn.* 6. 450. *Bew. Brit. Birds,* 2. 283. *Wils. Amer. Orn. v.* 8. *p.* 53. *pl.* lxvii. *f.* 4.

This species is in length three feet, and extends five feet two inches: the beak is black: the irides dark hazel: the upper part of the neck black, marked on the chin and lower part of the head with a large patch of white: lower part of the neck before white: back and wing-coverts brown, each feather tipped with whitish: rump and tail black: tail-coverts and

vent white: primaries black, reaching to the extremity of the tail: sides pale ashy-brown: legs and feet dusky-ash. Both sexes resemble each other.

Common in a wild state in most parts of North America, and also in some of the northern regions of Europe, but domesticated in the southern. They appear in the United States of America during their autumnal and vernal migrations in great numbers: their first arrival on the coast of New Jersey is in October, and if abundant are said to be a sure prognostic of severe weather: some continue all the winter, and frequent the shallow bays and marshy islands; their principal food being the broad tender green leaves of a marine plant, and also the roots of the sedge; they occasionally frequent the inlets for gravel. They swim well, and if a wing be broken, dive and go a great way under water. Their flight is heavy and laborious, generally in a straight line, or in two lines approximating to a point, in the form of the letter V; in both cases the van is led by an old gander, who every now and then utters his cry, which is returned by another of the party. Their course is in a straight line, with the exception of the undulations in their flight. Pennant gives the following interesting account of the method of taking them in Hudson's Bay: "The English of Hudson's Bay depend greatly on Geese, of these and other kinds, for their support, and in favourable years kill three or four thousand, which they salt and barrel. Their arrival is impatiently attended; it is the harbinger of the spring, and the month named by the Indians the goose-moon. They appear usually at

our settlements in numbers about St. George's day, O. S. and fly northward to nestle in security. They prefer islands to the continent, as further from the haunts of men. The English send out their servants, as well as Indians, to shoot these birds on their passage. It is in vain to pursue them; they therefore form a row of huts made of boughs, at musket-shot distance from each other, and place them in a line across the vast marshes of the country. Each hovel, or, as they are called, *stand*, is occupied by only a single person: these attend the flight of the birds, and, on their approach, mimic their cackle so well, that the Geese will answer, and wheel and come nearer the stand. The sportsman keeps motionless, and on his knees, with his gun cocked the whole time, and never fires till he has seen the eyes of the Geese: he fires as they are going from him, and picks up another gun that lies by him, and discharges that. The Geese which he has killed he sets up on sticks, as if alive, to decoy others; he also makes artificial birds for the same purpose. In a good day (for they fly in very uncertain and unequal numbers) a single Indian will kill two hundred. Notwithstanding every species of Goose has a different call, yet the Indians are admirable in their imitation of every one. The autumnal flight lasts from the middle of August to the middle of October; those which are taken in this season, when the frosts begin, are preserved in their feathers, and left to be frozen for the fresh provisions of the winter stock. The feathers constitute an article of commerce, and are sent to England."

Wounded birds have frequently been completely domesticated, and readily pair with the tame grey Geese: the offspring are said to be larger than either, but the characteristic marks of the wild bird still predominate. On the approach of every spring, however, they discover symptoms of great uneasiness, frequently looking up into the air, and attempting to go off: some whose wings have been cut have travelled on foot in a northern direction, and have been found at the distance of several miles from home; others have actually succeeded in mounting into the higher regions of the air, and joined a passing party to the north; and Wilson relates an anecdote of one that had been caught alive in the autumn, which, upon the reproduction of its quill-feathers in the following spring, actually joined a party sojourning northward, and returned to its owner in the succeeding autumn, accompanied by two companions.

CHINESE SWAN.

(Cygnus sinensis.)

CY. *griseo-albus, supra griseo-fuscescens, pedibus longioribus.*
Grey-white Swan above grey-brown, with the legs long.
Anas cygnoides. *Linn. Syst. Nat.* 1. 194. *Gmel. Syst. Nat.* 1. 502. *Lath. Ind. Orn.* 2. 838.
Anser Guineensis. *Briss. Orn.* 6. 280. *Raii, Syn.* 138.
L'Oie de Guinée. *Buff. Hist. Nat. Ois.* 9. 72. *pl.* 3. *Buff. Pl. Enl.* 347. *Cuv. Reg. Anim.* 1. 529.
Chinese Goose. *Penn. Arct. Zool.* 2. 571. *Lath. Gen. Syn.* 6. 447.
Swan Goose. *Bew. Brit. Birds,* 2. 281.

CHINESE SWAN.

Upwards of three feet in length, and intermediate in size between the Domestic Swan and the Common Goose: it has a large knob at the base of the upper mandible of the beak, and a nearly naked skin, hanging down like a pouch, or wattle, under the throat: a white line extends from the corners of the mouth over the forehead: the base of the beak is orange: irides reddish-brown: on the hinder part of the neck, from the head to the back, runs a dark brown or blackish stripe: the fore part of the neck and the breast are yellowish-brown: the back, and all the upper parts are brownish-grey, edged with a lighter colour: the sides and the feathers which clothe the thighs, are nearly similar in colour to that of the back, and edged with white: the belly is white: the legs orange. This species varies much in the colour of its plumage, beak, and legs, and the female is usually smaller than the male: she has the head, neck, and breast fulvous, paler on the upper part: the back, wings, and tail dull brown, with pale edges: the belly white: knob on the beak smaller than in the male.

Said to have been brought originally from Guinea, and to be common about the Lake Baikal in Siberia, and in Kamtschatka. They are now pretty generally diffused over the European continent in a domesticated state, and are said to be more noisy than the Common Goose, sounding the alarm by their hoarse cacklings and loud shrill cries. They will breed, it is asserted, with the Common Goose, and their offspring are as prolific as those of any other kind!

ANSER. GOOSE.

Generic Character.

Rostrum capite æqualis, subconicum, rectum, apice rotundato, marginibus laminato-dentatis; mandibulâ superiore curvatâ, apice unguiculatâ, inferiore planâ.

Nares ad basin rostri sitæ.

Collum mediocre.

Alæ simplices.

Pedes in equilibrio corporis insertæ, tetradactyli; *digiti* anteriores toti palmati, *pollex* liber; *tarsi* elongati.

Beak as long as the head, rather conic, straight, the tip rounded, the margins laminato-dentated; the upper mandible curved, its tip hooked, the lower flat.

Nostrils placed near the base of the beak.

Neck rather short.

Wings simple.

Legs inserted in the equilibrium of the body, four-toed; the *anterior toes* united by a membrane, the hinder one free; the *tarsi* elongated.

ANSER. Briss., Cuv.
ANAS. Linn., Gmel., Lath.

GEESE are distinguished from the birds of the former genus by the absence of the carneous appendage at the base of the beak; in having the beak

itself as long as the head, straighter before than behind ; the tips of the lamellæ, with which its edges are adorned, appear like pointed teeth : they have the legs planted in the equilibrium of the body, and their tarsi are elongated. They live in meadows and marshes, swim but little, and never dive : their food consists principally of vegetable materials : during their flight they usually proceed in the form of an angle.

WHITE-FRONTED GOOSE.

(Anser albifrons.)

AN. *cinerea, fronte albâ.*

Ash-coloured Goose with the forehead white.

Anas albifrons. *Gmel. Syst. Nat.* 1. 509. *Lath. Ind. Orn.* 2. 842.

Anser septentrionalis sylvestris. *Briss. Orn.* 6. 269.

L'Oie rieuse. *Buff. Hist. Nat.* 9. 81. *Cuv. Reg. Anim.* 1. 531. *Temm. man. d'Orn.* 529. *Id.* 2 *Edit.* ii. 821.

Laughing Goose. *Edw. Glean. pl.* 153.

White-fronted Goose. *Penn. Brit. Zool.* 2. 268. *pl.* 94. *f.* 1. (*head.*) *Penn. Arct. Zool.* 2. 476. *Lath. Gen. Syn.* 6. 463. *Lew. Brit. Birds,* 6. *pl.* 240. *Walc. Syn.* 1. *pl.* 64. *Don. Brit. Birds,* 5. *pl.* 102. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 305.

UNDER thirty inches in length : the beak, space round the eyes, and the legs of an orange-yellow : the hook of the beak whitish : the irides brown : on the forehead is a large white space : under the throat

is also a white space, surrounded by a band of blackish-brown feathers: the rest of the head and neck are of an ashy-brown: the feathers of the back, the scapulars, the wing-coverts, and the sides of the body are dull brown, tipped with reddish-brown: the quills are black; the secondaries are tipped with white: the breast and belly are whitish, varied with several black feathers. The female is less, the white on the forehead is less extended, and all the colours are more clear.

Inhabits the marshes and heaths of the Arctic Circle, where it breeds: it visits the marshes of Holland in the autumn, and the fens of this country in the winter in small flocks, especially in severe weather: it also frequents Germany, the interior of France, Siberia, Russia, and parts of North America in the vicinity of Hudson's Bay, where it was found by Captain Franklin during his disastrous journey towards the Arctic Sea. Its eggs are not known, as it breeds too far north, and out of the reach of observation.

BEAN GOOSE.

(Anser segetum.)

AN. *cinereo-fusca sublus albida, alis griseis, tectricibus majoribus remigibusque secundariis apice albis, rostro nigro fasciâ aurantiâ.*

Ashy-brown Goose beneath whitish, with the wings grey, the greater coverts and secondary quills white at the tips, the beak black, with an orange fascia.

Anas segetum. *Gmel. Syst. Nat.* 1. 512. *Lath. Ind. Orn.* 2. 843.
Anser sylvestris. *Briss. Orn.* 6. 265.
L'Oie sauvage. *Buff. Hist. Nat. Ois.* 9. 30 ? *Buff. Pl. Enl.* 985 ? *Temm. man. d'Orn.* 527. *Id.* 2 *Edit.* ii. 820.
Wild Goose. *Albin. Birds,* 1. *pl.* 90.
Bean Goose. *Penn. Brit. Zool.* 2. 267. *Penn. Arct. Zool.* 2. 472. *Lath. Gen. Syn.* 6. 464. *Lew. Brit. Birds,* 6. *pl.* 239. *Walc. Syn.* 1. *pl.* 65. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 306.

Length upwards of thirty inches: the beak is black at its base and at the hook, and yellow in the middle: the membrane surrounding the eyes is of a blackish-grey: the irides are deep brown: the head and top of the neck are ashy-brown: the base of the neck and the under parts of the plumage are bright ash-colour: the top of the back, the scapulars, and all the wing-coverts are ashy-brown bordered with whitish: the rump is blackish-brown: the vent and under part of the tail are pure white: the legs are reddish-orange.

The young have the head and neck of a dull reddish-yellow; all the rest of the plumage of a clear ash; and generally three small white spots at the opening of the beak.

Native of the Arctic regions, migrating periodically towards the southern countries of Europe. They arrive in the fens of England in the autumn, sometimes in large flocks, and depart in April or May, retiring towards the north to breed; which they are reported to do in plenty in some of the Hebridal Islands of Scotland, laying ten or a dozen white eggs, in a nest placed in the marshes, or among the heath. They resort equally in the corn-fields

and uplands with the fens, and are said to feed on the green corn, which they seem to prefer to any other food. It is more abundant in England than the Wild Goose.

WILD GOOSE.

(Anser ferus.)

AN. *corpore supra cinereo subtus pallidiore, collo striato, rostro unicolore.*

Goose with the body above cinereous, beneath paler, the neck striped, the beak of one colour.

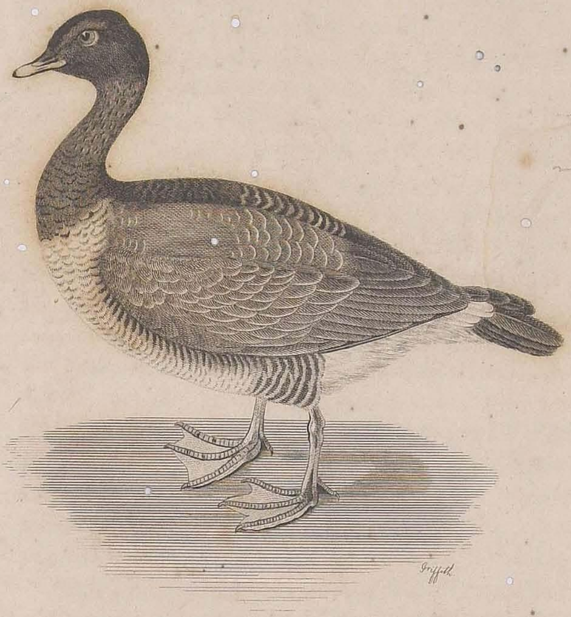
Anas anser (ferus.) *Linn. Syst. Nat.* 1. 197. *Gmel. Syst. Nat.* 1. 510. *Lath. Ind. Orn.* 2. 842.

L'Oie ordinaire. *Cuv. Reg. Anim.* 1. 530.

Oie cendrée, ou première. *Temm. man. d'Orn.* 526. *Id.* 2 *Edit.* ii. 818.

Grey-leg Goose. *Penn. Arct. Zool.* 2. 473. *Penn. Brit. Zool.* 2. 266. *Lath. Gen. Syn.* 6. 459. *Lewin. Brit. Birds,* 6. *pl.* 238. *Walc. Syn.* 1. *pl.* 61. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 292.

ABOUT three feet in length: the beak and the membrane of the eyes are of an orange-yellow: the hook of the beak is whitish: the irides are deep brown: the general colour of the plumage is clear ash colour: the top of the back, the scapulars, the middle and greater wing-coverts are ashy-brown, edged with whitish: the lesser coverts, the outer edge of the wings, and the base of the quills, are whitish-ash: the rump is ash colour: the abdomen and under



WILD GOOSE.

part of the tail are pure white: the legs are yellowish flesh-colour. The female is always smaller, the neck more slender, and the grey on the plumage more distinct: but in very old individuals of both sexes there occur several irregular patches of blackish-brown feathers on the breast and belly.

In a wild state this bird inhabits the marshy lakes and seas of the eastern parts of Europe and the west of Africa, but rarely appears beyond the 53d degree of latitude: it is very numerous in Germany and towards the central parts of Europe, but becomes rarer as we advance towards the west; occurring comparatively but seldom in France and Holland. In some parts of Britain, however, it was formerly very abundant, especially in the fens of Lincolnshire; the draining and cultivation of which have entirely depopulated those places of their native inhabitants; but in lieu thereof these swamps are now teeming with them in a domesticated and highly improved condition.

The Wild Goose lays from six to eight, sometimes ten or a dozen dirty green eggs, placed in a nest among rushes, heaths, and other elevated shrubs: the tame variety often lays a greater number, and sometimes a second time in the season, which last are seldom allowed to be hatched, but are used for domestic purposes.

Wild Geese are regularly seen migrating southward in the autumn, and northward in the spring, oftentimes in flocks of from fifty to a hundred, flying at great heights, and seldom resting by day: their cry is frequently heard while they are imperceptible

to the sight, from their distance above. On the ground they always arrange themselves in a line, and seem to descend rather for rest than refreshment; for, having continued in this manner for an hour or two, one of them, with a long loud note, sounds a kind of signal, to which the rest always punctually attend, and, rising in a group, they pursue their journey with alacrity. Their flight is conducted with singular regularity: they always proceed either in a line a-breast, or in two lines joining in an angle at the middle, like the letter V. In this order they generally take the lead by turns, the foremost falling back in the rear when tired, and the next in station succeeding to his duty. Their track is generally so high that it is almost impossible to reach them from a fowling-piece; and even when this can be done, they file so equally, that one discharge seldom kills more than a single bird.

They are very destructive to the growing corn in the fields where they happen to alight in their migrations. In some countries they are caught at such times in long nets, to which they are enticed by tame Geese placed there for the purpose. Other schemes are contrived to take them; but as they are very vigilant, feed only in the day-time, and betake themselves to the water at night, the fowler must exert his utmost care and ingenuity in order to accomplish his ends: all must be planned in the dark, and every trace of suspicion removed; for nothing can exceed the wary circumspection and acute ear of the sentinel, who, placed on some eminence, with outstretched neck, surveys every thing that moves

within the circle of his observations, and the instant he sounds the alarm, the whole flock betake themselves to flight.

Exclusive of the value of the eggs of the tame Geese, these birds are of immense importance in other respects, and great quantities are kept in most of the fenny counties of England, especially in Lincolnshire, where several persons possess as many as a thousand breeders, each of which, on an average, will bring up seven young ones. They are bred for the sake of their quills and feathers, for which they are stripped, while alive, once in the year for their quills, and no less than five times for their feathers. The first plucking commences about Lady-day for both, and the other four between that time and Michaelmas. It is said that, in general, the birds do not suffer very much from this operation; but the young ones are very noisy and unruly. Pennant says that goslings of only six weeks old are not spared, for their tails are plucked to inure them early to the custom. The possessors, except in this cruel practice, are said to treat them with great kindness, lodging them very often even in the same room with themselves. These Geese usually breed but once a-year, but if well kept they sometimes hatch twice in a season. During their sitting, each bird has a space allotted to it in rows of wicker pens, placed one above another, tier above tier. Some persons place water and corn near the nests, others drive them to the water twice a day, and replace each female upon her own nest as soon as she returns. This business requires the attendance of the *gozzard*, or *goose-herd*, a month

at least, in which time the young are brought forth: as soon afterwards as the brood are able to waddle along, they are, together with their dams, driven to the adjacent fens or marshes, on whose luxuriant grassy-margined pools they feed and thrive, without requiring any further attendance until the autumn.

Incredible numbers are frequently driven from the distant counties to London for sale, frequently two or three thousand in a drove. The drivers are each provided with a long stick, at one end of which a red rag is tied as a lash, and a hook is fixed at the other: with the former, of which the Geese seem much afraid, they are excited forward; and with the latter, such as attempt to stray, are caught by the neck and kept in order; or if lame, they are put into an hospital cart, which usually follows each large drove. In this manner they perform their journeys from distant parts, and are said to get forward at the rate of eight or ten miles in a day: those which become fatigued are fed with oats, and the rest with barley.

Notwithstanding the apparent simplicity of Geese, and the awkwardness of their gesture, they are not destitute either of sentiment or understanding. The courage with which they protect their young and defend themselves against the attacks of ravenous birds, and recorded instances of warm attachment which they have exhibited, render the general contempt of them ill-founded.

SNOW GOOSE.

(Anser hyperborea.)

AN. *corpore niveo, aut griseo, subtus albo, fronte flavescente, rostro, pedibusque rubris.*

Goose with the body snowy, or grey, beneath white, the forehead yellowish, the beak and legs red.

Anser hyperboreus. *Pallas, Spic.* vi. *p.* 26.

Anser niveus. *Briss. Orn.* 6. 288.

Anas hyperborea. *Gmel. Syst. Nat.* 1. 504. *Lath. Ind. Orn.* 2. 837.

Oie hyperborée, ou de neige. *Temm. man. d'Orn.* 525. *Id.* 2 *Edit.* ii. 816. *Cuv. Reg. Anim.* 1. 531.

Snow Goose. *Penn. Arct. Zool.* 2. 479. *Lath. Gen. Syn.* 6. 445. *Wils. Amer. Orn.* viii. *p.* 76. *pl.* 68. *f.* 5. old male.

YOUNG.—Anas cærulescens. *Linn. Syst. Nat.* 1. 198. *Gmel. Syst. Nat.* 1. 513. *Lath. Ind. Orn.* 2. 836.

Anser sylvestris freti Hudsonis. *Briss. Orn.* 6. 275.

L'Oie des Esquimaux. *Buff. Hist. Nat. Ois.* 9. 80.

Blue-winged Goose. *Penn. Arct. Zool.* 2. 474. *Edw. Glean. pl.* 152. *Lath. Gen. Syn.* 6. 469. *Lath. Syn. Sup.* ii. 346. *Wils. Amer. Orn.* viii. *p.* 89. *pl.* lxix. *f.* 5.

ABOUT thirty inches in length: the upper mandible of the beak is bright red, the lower whitish; the hooks of both blue: the irides are grey-brown: naked circle round the eyes fine red: the forehead yellowish: the head, neck, and body are pure white: the quills are white for half their length, the rest black: the legs are of a very deep red: the young of the first year, and until the age of four, differ very much from the old: at first all the plumage is of a grey-brown or bluish; then the head and part of the

neck, with the belly, become white, and the wings variegated. Temminck says of two young specimens, killed in Europe, that they had the head and the upper part of the neck pure white: the lower part of the neck, the breast, and back of an ashy-violet, with all the feathers tipped with clear brown: the wing-coverts were pure ash-colour: the abdomen and vent whitish, varied with brown feathers: the angle of the beak and the edges of the mandible black: the legs brown.

These birds inhabit the regions of the Arctic Circle, occasionally migrating to the more temperate climates of Prussia, Austria, Hudson's Bay, and the United States of America. They arrive in the river Delaware from the north early in November, sometimes in considerable flocks, and are very noisy: they feed on the roots of reeds: their flesh is esteemed excellent, and in Siberia they form an essential article of subsistence to the natives, each family, it is said, preserving thousands annually, which, after being plucked and gutted, are thrown in heaps into holes dug for that purpose, and covered only with earth: the mould freezes, and forms over them an arch; and whenever the family have occasion to open one of these magazines, they find them sweet.

The method adopted by the Siberians to obtain these birds is highly curious: according to the account furnished by Pennant, they place near the banks of the rivers a great net in a straight line; or else form a hovel of skins sewed together: this done, one of the company dresses himself in the skin of a white reindeer, advances towards the flock of Geese, and

then turns back towards (on all fours) the net or hovel; and his companions go behind the flock, and, by making a noise, drive them forwards. The simple birds mistake the man in white for their leader, and follow him within reach of the net, which is suddenly pulled down, and thus captures the whole. When he chooses to conduct them even into the hovel, they follow in the same manner; he creeps in at a hole left for that purpose, and out at another on the opposite side, which he closes up. The Geese follow him through the first; and as soon as they are in, he passes round and secures every one of them.

Some travellers assert that these birds are very bold and easily captured; but, on the other hand, there are others who deny this, and attribute to them a more than ordinary degree of shyness, and aver that they are so watchful as not to allow a person to approach them within two or three gunshots.

GREAT GOOSE.

(Anser grandis.)

AN. *corpore nigricante subtus albo, rostro nigro, pedibus coccineis.*
Goose with the body dusky, beneath white, the beak black, legs scarlet.
Anas grandis. *Gmel. Syst. Nat.* 1. 504. *Lath. Ind. Orn.* 2. 837.
Great Goose. *Penn. Arct. Zool.* 2. 570. *Lath. Gen. Syn.* 6. 446.

A LARGE species, weighing nearly thirty pounds: its beak is black, with its base tawny: the upper parts

of the plumage are dusky, and the under pure white: the legs bright scarlet.

Abundant in Siberia and Kamtschatka.

BARRED-HEADED GOOSE.

(Anser Indica.)

An. *grisea subtus pallide cinerea, capite colloque albis, lunulâ occipitis maculâque subtus nigris, uropygio crissoque albis.*

Grey Goose beneath pale ash, with the head and neck white, a lunule on the occiput and spot beneath white, the rump and vent white.

Anas Indica. *Lath. Ind. Orn.* 2. 839.

Barred-headed Goose. *Lath. Gen. Syn. Sup.* 277.

"Length twenty-six inches: beak two inches long and of a bright yellow: nail black: the head, throat, and hind part of the neck are white: at the back part of the head, below the eye, a crescent of black, the horns curving upward towards the eye; below this a second; and under this most part of the back of the neck is black also: the back is of a fine pale grey; the edges of the feathers lightest: wings pale ash colour: edges of the prime quills dusky: lower part of the neck before, breast, and upper part of the belly, a most elegant pale ash colour, edged with white: lower belly deep brown, edged with white: rump and vent snow white: tail fine light grey, tipped with white: legs reddish yellow."

"Inhabits India: common in the winter months, and very destructive to the corn: it is supposed to come

from Thibet and other parts towards the north, departing again as the summer approaches."—*Latham.*

MOUNTAIN GOOSE.

(Anser montana.)

AN. *capite collo alarumque pennis rubro-viridibus.*
Goose with the head, neck, and wing-feathers of a red-green.
Anas montana. *Gmel. Syst. Nat.* 1. 510. *Lath. Ind. Orn.* 2. 841.
Hill, or Mountain Goose. *Lath. Gen. Syn.* 6. 458.

"SIZE larger than the Tame Goose: the wing-feathers, and those of the head, of a bright shining red-green. Inhabits the Cape of Good Hope, where it keeps mostly on the hills, and feeds on grass and herbs."—*Latham.*

The above is all that is said of this species.

BEERING GOOSE.

(Anser Beringii.)

AN. *corpore albo, alis nigris, regione aurium virescenti albâ.*
Goose with the body white, the wings black, the region of the ears of a greenish-white.
Anas Beeringii. *Gmel. Syst. Nat.* 1. 508. *Lath. Ind. Orn.* 2. 843.
Beering Goose. *Penn. Arct. Zool.* 2. 475. *Lath. Gen. Syn.* 6. 465.

Size of the Wild Goose: at the base of the beak a yellow excrescence, radiated in the middle with bluish-black feathers: round the ears a greenish-white space: eyes black, encircled with yellow, and rayed with black: back, fore part of the neck, and belly, white: wings black: hind part of the neck bluish. Taken off Kamtschatka, in the isle of Beering: the natives pursue them in boats, and kill them at the time of moulting; at other times hunt them on land with dogs, or catch them in pits covered with grass.

WHITE GOOSE.

(Anser candidus.)

An. *corpore suprà subtusque albo, remigibus primis apice nigris, rostro pedibusque rosaceis.*

Goose with the body above and beneath white, the tips of the primary quills black, the beak and legs rose-colour.

Anser candidus. *Vieill. 2 Edit. du Nouv. Dict. d'Hist. Nat. t.* 23. *p.* 331.

Described by M. de Azara by the name of Ganso Blanco: it is found in the environs of the river Plate, about the twenty-eighth degree of south latitude, in large flocks: it is very wild: its flesh and quills are but in little estimation: its plumage, with the exception of the primary quills, which are black at the tips, is of a snow white: the beak and legs are pale flesh colour. Both sexes are similar.

COSCOROBA GOOSE.

(Anser Coscoroba.)

An. *rostro extremo dilatato, corpore albo.*
Goose with the tip of the beak dilated, the body white.
Anas Coscoroba. *Gmel. Syst. Nat.* 1. 503. *Lath. Ind. Orn.* 2. 835.
Coscoroba Goose. *Lath. Gen. Syn. Sup.* ii. 245.

Described by Molina, who says it is of a large size: that it is wholly white, except the beak and legs, which are red: the eyes of a fine black.

It inhabits Chili, and is much esteemed from its tameness in confinement.

HYBRID GOOSE.

(Anser hybrida.)

An. *rostro semicylindrico, cerâ rubrâ, caudâ acutiusculâ.*
Goose with the beak semicylindric, the cere red, the tail sharp-pointed.
Anas hybrida. *Gmel. Syst. Nat.* 1. 502. *Lath. Ind. Orn.* 2. 835.
Hybrid Goose. *Lath. Gen. Syn. Sup.* ii. 345.

About the size of the Wild Goose: the male is of a pure white, with the beak and legs yellow: the beak is half cylindrical: the cere red. The plumage

of the female is black, a few streaks of white on the edges of the feathers alone excepted: the beak and legs are red.

Inhabits South America: the male and female are said to remain always by themselves, and not to associate in flocks, after the manner of the generality of Geese: the female lays about eight white eggs, on the banks of rivers, in a hole formed out of the sand.

CHENALOPEX. SPURWING.

Generic Character.

Rostrum capite longiùs, rectum, gracile, apice rotundato, margo laminato; mandibulâ superiore curvatâ, apice unguiculatâ, inferiore planâ.	*Beak* as long as the head, slender, straight, its tip rounded, the margin laminated; the upper mandible curved, its tip hooked, the lower flat.
Nares ad basin rostri positæ.	*Nostrils* placed at the base of the beak.
Collum mediocre.	*Neck* mediocral.
Alæ calcaratæ.	*Wings* armed with spurs.
Pedes in equilibrio corporis sitæ, tetradactyli; *digiti* anteriores toti palmati, *pollex* simplex; *tarsi* subelongati.	*Legs* placed in the equilibrium of the body, four-toed; the *anterior toes* entirely webbed, the *hinder* one simple; the *tarsi* somewhat elongated.

CHENALOPEX Antiquorum.
ANAS. Linn., Gmel., Briss., Lath.
ANSER. Cuv.

DISTINGUISHED from the preceding genus by the spurs or knobs with which the bend of the wing is armed, and from the following by the superior length of the beak.

According to Geoffroy-Saint-Hilaire, the Spur-wing is the *Chenalopex*, or Vulpanser of the ancients, which was revered by the Egyptians from the great attachment it has for its young; I have therefore applied that name to the genus; the propriety of separating which from the rest of the Geese will probably be called in question by the generality of ornithologists, especially those of the Linnean school, who will be apt to exclaim with Temminck, in his remarks on the *Uria alle** (Man. d'Orn. 2 Edit. v. ii. p. 929), "Il est vrai que si on veut avoir égard à toutes les légères nuances dans les formes du bec, cet oiseau pourraît alors être considéré comme formant un genre distinct; mais il faudrait aussi en faire un pour le Guillemot de Brunnich, et dans le cas il ne serait pas difficile de prouver que dans le plus grand nombre des genres adoptés de nos jours, en pourrait *transformer presque toutes les espèces en genres*, et encombrer le système de quelques centaines de noms de plus." But being an advocate for generic distinctions founded upon every gradation of character, I have not only adopted this, but have detached several others from the genus Anas of Linné, &c., with respect to the merits of which future observations must decide; my object being to show those apparently detached groups whose manners and habits are, as far as known, widely different, without regarding the modern prejudice against the use of the term genus: the objections to which are generally more nominal than real. For some excellent remarks

* Mergulus melanoleucos.

EGYPTIAN SPURWING.

upon this subject, I must refer my readers to the second number of the Zoological Journal, wherein they will find the subject of ornithological nomenclature ably discussed by my friend N. A. Vigors, Esq. F. L. S. &c. to whom I am greatly indebted for many observations relative to the arrangement of the *Natatores*.

EGYPTIAN SPURWING.

(Chenalopex Ægyptiaca.)

Ch. *corpore undulato, vertice albo, speculo alari candido fasciâ nigro.*

Spurwing with the body waved, the crown white, the alar speculum white, with a black fascia.

Anas Ægyptiaca. *Linn. Syst. Nat.* 1. 197. *Gmel. Syst. Nat.* 1. 512. *Briss. Orn.* 6. 284. *pl.* 27. *Lath. Ind. Orn.* 2. 840.

L'Oie d'Egypte. *Buff. Hist. Nat. Ois.* 9. 79. *Buff. Pl. Enl.* 379.

L'Oie Sauvage du Cap de Bonne Esperance. *Buff. Pl. Enl.* 982, 983.

La Barnacle armée. *Cuv. Reg. Anim.* 1. 531.

The Ganser. *Alb. Birds,* 1. *pl.* 93.

Egyptian Goose. *Lath. Gen. Syn.* 6. 453.

Length two feet three inches: the beak two inches long, and red, with a black tip: the nostrils dusky: irides yellowish-white: the eyelids reddish: on each side of the head is a large rufous or chesnut spot, encircling the eyes: the crown of the head and the throat are white, the latter spotted with chesnut: the neck, for about two parts of its length, is pale ches-

nut, becoming of a deeper colour on the lower part: the upper parts of the back and the scapulars are of a brownish-red, crossed with numerous dusky lines: the back and rump are black: the lower part of the neck in front, the breast, sides, and thighs are very pale rufous, crossed with numerous dusky lines, and over the breast is a large deep chesnut-coloured spot: the belly is white: the under tail-coverts yellowish: the wing-coverts are white: the greater ones nearest the body crossed with black at the ends, and those farthest from it entirely black: the greater quills are black, and all, except the five first, edged with green gold: the secondaries are edged with chesnut: the spur on the bend of the wing is half an inch in length: the tail is coloured the same as the primaries: the legs are red: the claws dusky. The female has the chesnut patch round the eyes much smaller: the chin white: the chesnut patch on the breast smaller, or sometimes wanting: the lesser wing-coverts white, the others pale ash-colour, with darker margins; the lower ones fringed with white, forming a bar on the wing: the scapulars and secondaries are tinged with chesnut.

Inhabits various parts of Africa, especially Egypt and the vicinity of the Cape of Good Hope; from whence they have been introduced into this country, and are frequently reared on the estates of the gentry on account of their beauty; but have always a propensity to fly away. They are much attached to their young.

BERNICLA. BERNICLE.

Generic Character.

Rostrum capite brevior, subconicum, rectum, gracile, apice rotundato, margo laminato-dentato ; mandibulâ superiore curvatâ, apice unguiculatâ, inferiore planâ.	*Beak* shorter than the head, subconic, straight, slender, the tip rounded, the margin laminato-dentate ; the upper mandible curved, the tip hooked, the lower flat.
Nares ad basin rostri sitæ.	*Nostrils* placed at the base of the beak.
Collum mediocre.	*Neck* mediocral.
Alæ plerumque simplices.	*Wings* generally simple.
Pedes in equilibrio corporis positæ, tetradactyli ; *digiti* anteriores palmati, *pollex* simplex ; *tarsi* subelongati.	*Legs* placed in the equilibrium of the body, four-toed ; the *anterior toes* webbed, the *hinder one* simple ; the *tarsi* slightly elongated.

BERNICLA. Briss.
ANAS. Linn.
ANSER.

THESE are distinguished from the Geese by their shorter and slenderer beak, the edges of which are

reflected over the lamellæ, and obstruct the view of them. Many of the species have the bend of the wing armed with a blunt knob; others have the webs of the toes greatly divided, and lead us on to the succeeding group, or tribe, Cereopsis; these may probably constitute a new genus, as their habits are very different from those of the rest of the Bernicles; and they delight to perch upon trees, after the manner of some of the true Ducks.

A. Digitis anterioribus latè palmatis.
A. With the anterior toes entirely webbed.

BRENT BERNICLE.

(Bernicla Brenta.)

Be. *fusca, capite collo pectoreque nigris, collari albo.*
Brown Bernicle, with the head, neck, and breast black, collar white.

Anas Bernicla. *Linn. Syst. Nat.* 1. 198. *Gmel. Syst. Nat.* 1. 513. *Lath. Ind. Orn.* 2. 844.
Brenta. *Briss. Orn.* 6. 304. *pl.* 31.
Le Cravant. *Buff. Hist. Nat. Ois.* 9. 87. *Buff. Pl. Enl.* 342. *Cuv. Reg. Anim.* 1. 531.
Oie Cravant. *Temm. man. d'Orn.* 531. *Id.* 2 *Edit.* ii. 824.
Brent, or Brand Goose. *Penn. Brit. Zool.* 2. 270. *Penn. Arct. Zool.* 2. 478. *Alb. Birds,* 1. *pl.* 93. *Hayes, Brit. Birds,* 1. *pl.* 25. *Lath. Gen. Syn.* 6. 467. *Lew. Brit. Birds,* 7. *pl.* 243. *Walc. Syn.* 1. *pl.* 63. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 311. *Wils. Amer. Orn.* viii. *p.* 131. *pl.* lxxii. *f.* 1.

Two feet in length: the beak black: the irides dusky brown: the head, neck, and top of the breast are dull black: on the sides of the neck is a space clothed with dusky feathers, which are tipped with white: the back, scapulars, and wing-coverts are very deep grey, tipped by an indistinct band of clear brown: the middle of the belly is ashy-brown: the feathers on the sides of the body are deep ash-colour, tipped by a broad whitish band: the vent and tail-coverts are pure white: the quills, secondary and tail-feathers are deep black: the legs are black, slightly tinged with brown. The female differs in being rather less. The young of the year have not the white space on the sides of the neck; this part, as well as the head and the top of the breast, are ashy-black, which colour, of a paler tinge, predominates over the back; the whole of the feathers of which part, as well as those of the breast, being tipped with a reddish-brown band, as are also those of the sides of the body: the legs are reddish-black.

According to Temminck, the rings of which the tracheal tube of the male is composed become suddenly enlarged at some distance from the glottis, then resume their original diameter, and become again dilated near the branching off; at this place they become suddenly very straight, and give rise to a straight cartilaginous tube, communicating with the bronchiæ, which are funnel-shaped, and composed of entire and very solid rings.

Brents inhabit the marshes and heaths of the Arctic regions, and are very abundant in the winter and

spring in Holland, less common in France and England, and rare towards the inland countries of Europe; but occasionally they migrate in such myriads as nearly to starve each other. In the year 1740, according to Buffon, they appeared in such vast flocks on the coasts of Picardy, upon the corn fields, that the inhabitants were raised *en masse* in order to destroy them; which, however, they could not effect, although hundreds, nay thousands, were knocked down with poles, and a change in the weather only caused them to depart. In the same year, we are also informed, by Mr. Boys of Sandwich, they were so plentiful on the coast of Kent, that they were in so starving a condition as to suffer themselves to be knocked down with stones and sticks, and were carried in carts to the neighbouring towns, where purchasers were allowed to pick and choose for sixpence a piece. The same gentleman also informs us that they were very abundant on the same coast in the year 1803, and were so miserably poor and debilitated as to permit themselves to be taken by hand: it was also remarked by him that they were unaccompanied by any other species of Goose or Bernicle.

They breed in very high latitudes in the Arctic Circle, laying several white eggs. Their nourishment is similar to that of the other species of the genus, and their manners, as far as known, are likewise similar: they are said to be easily tamed: their voice is hoarse and disagreeable.

COMMON BERNCLE.

(Bernicla erythropus.)

Be. *cinerea supra nigro alboque undulatâ, collo nigro, facie abdomineque albis.*

Ash-coloured Bernicle waved above with black and white, the neck black, the face and abdomen white.

Anas erythropus. *Linn. Syst. Nat.* 1. 197. *Gmel. Syst. Nat.* 1. 512. *Lath. Ind. Orn.* 2. 843.

Anser leucopus. *Becks. Temm. man. l. c.*

Bernicla. *Briss. Orn.* 6. 300. Young.

Bernicla minor. *Briss. Orn.* 6. 302. Old female.

La Bernache. *Buff. Hist. Nat. Ois.* 9. 93. *f.* 5. *Buff. Pl. Enl.* 855.

Oie Bernache. *Temm. man. d'Orn.* 530. *Id.* 2 *Edit.* ii. 823.

Canada Goose. *Alb. Birds,* 1. *pl.* 92.

Bernicle, or Clakis. *Penn. Brit. Zool.* 2. 269. *Penn. Arct. Zool.* 2. 479. *Hayes, Brit. Birds,* 1. *pl.* 24. *Lath. Gen. Syn.* 6. 466. *Lew. Brit. Birds,* 7. *pl.* 242. *Walc. Syn.* 1. *pl.* 62. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 307. *Bing. Anim. Biog.* ii. 330.

About twenty-six inches in length: the beak is black: the irides dusky-brown: the forehead, sides of the head, and the throat, are of a pure white: between the beak and the eye is a small blackish streak: the occiput, nape, neck, top of the breast, quills, and tail are deep black: the feathers of the back, the scapulars, and the wings are greyish-ash at their base, and have a broad black band towards their tip, and the tips themselves are greyish-white: all the under parts of the plumage are pure white, except the feathers on the sides of the body, which are slightly tinged

with ash: the legs are black. The female is less than the male. The young of the year has a broad blackish band, formed by two small spots, between the beak and the eye: several blackish spots on the forehead: the feathers of the back and of the wings tipped by a band of bright red; and the feathers of the sides deeply tinged with ash-colour: the legs are blackish-brown. Both sexes possess an obtuse knob upon the bend of the wing.

This species inhabits the arctic regions, and in its autumnal and brumal migrations visits the more temperate regions of Holland, France, Germany, England, &c. It frequents the north-west coasts of this country and some parts of Ireland in large flocks during the winter, but is rarely seen in the south, except in very severe weather. About February it retires to the north to breed, and is then found in Russia, Lapland, and other high latitudes.

The history of this bird has been rendered singularly remarkable by the marvellous accounts which were related in the darker ages concerning its growth; it being a received opinion that the Bernicle was produced in a kind of shell, the *lepas anatifera* of Linné, growing on rotten ship timber, and other kinds of wood and trees which lay under water on the coasts! Nay, writers of no mean repute have absolutely written expressly upon the subject. Among them may be reckoned one Maier, who asserts that he opened an hundred of the shells in the Orkneys, and found in all of them the rudiments of the bird completely formed!

Gerard, the famous botanist, is another writer on

this subject, and the following is his account of this wonderful transformation, in his own words: "What our eyes have seen, and our hands have touched, we shall declare. There is a small island in Lancashire, called the Pile of Foulders, wherein are found broken pieces of old and bruised ships, some whereof have been cast thither by shipwrecks; also the trunks and bodies, with the branches of old and rotten trees, cast up there likewise; whereon is found a certain spume or froth, that in time breedeth unto certain shells, in shape like those of the muscle, but sharper pointed, and of a whitish colour, and the end whereof is fastened unto the inside of the shell, even as the fish of oysters and muscles are; and the other end is made fast unto the belly of a rude masse or lump, which in time cometh into the shape and form of a bird. When it is perfectly formed, the shell gapeth open, and the first thing that appeareth is the aforesaid lace or string; next cometh the legs of the bird hanging out; and as it groweth greater, it openeth the shell by degrees, till at length it has all come forth, and hangeth only by the bill. In short space after it cometh to full maturitie, and falleth into the sea, where it gathereth feathers, and groweth to a fowle, bigger than a Mallard, and lesser than a Goose, having black legs, and bill or beake, and feathers black and white, spotted in such manner as our Magpie, called in some places Pie-annes, which the people of Lancashire call by no other name than Sea-Goose; which place aforesaid, and all those places adjoyning, do so much abound therewith, that one of

the best is bought for threepence. For the truth hereof, if any doubt, may it please them to repair to me, and I will satisfy them by the testimonies of good witnesses."—Thus far Gerard!

Again, Sir Robert Murray, in his account, inserted in the Philosophical Transactions, says, that he found an old fir tree on the coast of Scotland, covered with Bernicle shells, and that in every shell that he opened he found a perfect sea fowl; the little bill, like that of a Goose; the eyes marked; the head, neck, breast, wings, tail, and feet, formed; the feathers every where perfectly shaped, and blackish coloured; and the feet like those of other water fowl, to his best remembrance!!

Few subjects seem to have been more circumstantially related, or to rest on better evidence, than the above; so natural to man is credulity, which passes all bounds, where the prodigy of an event takes firm hold of the imagination, and lays the understanding asleep. Such are some of the wild chimeras that have been detailed concerning the origin of these birds, which ridiculous fables once enjoyed much celebrity, and were admitted by many authors!—Such is the folly of mankind to give credence to every wonderful tale—such the dangerous contagion of error and superstition! Enough has been said on this subject to show how contagious the errors of science are, and how prone we are to become acquainted with, and to believe, the fascinations of the marvellous. The absurd notion of the annual submersion, or torpidity, of Swallows and Martins, so tena-

RED-BREASTED BERNICLE.

ciously insisted on by many persons in the present day, forms an apt accompaniment to the chimerical dreams respecting the birth of the Bernicle, and will, it is to be hoped, in its turn disappear before the penetrating radiance and calm investigation of truth.

RED-BREASTED BERNICLE.

(Bernicla ruficollis.)

Be. *supra nigra, collo rufo, corpore subtus maculâ ante oculos strigâque longitudinali collis utrinque albis.*

Bernicle above black, with the neck red, the body beneath, spot before the eyes, and longitudinal stripe on each side of the neck, white.

Anser ruficollis. *Pall. Spic.* 6. 21. *pl.* 4. *Gmel. Syst. Nat.* 1. 511. *Lath. Ind. Orn.* 2. 841.

Anas torquata. *Gmel. Syst. Nat.* 1. 514.

Oie à cou roux. *Temm. man. d'Orn.* 533. *Id.* 2 *Edit.* ii. 826.

Red-breasted Goose. *Penn. Arct. Zool.* 2. 571. *C. Lath. Gen. Syn.* 6. 455. *Lew. Brit. Birds,* 7. *pl.* 241. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 289.

About twenty-two inches in length: the beak is brown, with its hook black: the irides are yellowish-brown: between the beak and the eye is a white space: behind the eyes and on the sides of the neck, and also a band which surrounds the lower part of the breast, and returns to the back, white: the top of the head, the throat, belly, tail, and all the upper parts are deep black: the vent, under tail-coverts, and rump are pure white: the fore part of the neck

and the breast are bright red: a band of black extends the entire length of the hinder part of the neck: the greater wing-coverts are tipped with white: the legs are black.

This beautiful bird inhabits the arctic countries of Asia, living on the borders of the Frozen Ocean: it appears periodically in Russia, and occasionally in Germany and other European countries. In England four or five specimens only are recorded to have been killed or taken, one of which was shot near London in the severe frost of 1766; a second captured near Wycliffe, in Yorkshire, and the rest in various counties. The Wycliffe bird was kept there for several years in a pond amongst the tame Ducks, and became quite tame and familiar. There is a fine specimen in the British Museum of recent capture; and in the severe winter of 1813, three or four specimens were killed in Cambridgeshire, but, unfortunately for the scientific naturalist, cooks not being always ornithologists, the birds in question were sacrificed to the spit. This species is said to be quite free from any fishy taste.

MADAGASCAR BERNICLE.

(Bernicla Madagascariensis.)

BE. *obscure viridis, facie ultra oculos gulâ abdomineque albis, jugulo imo pectore lateribusque ferrugineis fusco undulatis, infra aures maculâ ovatâ viridi.*

Obscure green Bernicle with the face beyond the eyes, the throat, and abdomen white; the lower part of the jugulum, breast, and sides rusty, waved with brown; beneath the ears a green ovate spot.

Anas Madagascariensis. *Gmel. Syst. Nat.* 1. 522. *Lath. Ind. Orn.* 2. 875.

Sarcelle male de Madagascar. *Buff. Hist. Nat. Ois.* 9. 274. *Buff. Pl. Enl.* 770.

Madagascar Teal. *Lath. Gen. Syn.* 6. 556.

LENGTH about one foot: beak an inch long, and yellow, with a black tip: the irides are yellow: the top and fore parts of the head and neck white, passing on the sides behind the eyes and ending in a point at the region of the ears: the rest of the head and neck is dark dusky greenish-black, with an oval patch of paler green below the ears: the lower part of the neck and breast pale rust-colour, undulated with dusky lines, and passing backwards in a collar: the upper part of the body, wings, and tail, dark green: the sides clouded with rust-colour: the middle of the belly and vent white: the quills dusky: the wings with a white streak: the legs dusky. Inhabits Madagascar.

COROMANDEL BERNICLE.

(Bernicla Coromandeliana.)

Be. *alba, vertice dorso alis caudâque æneo-fuscis, collo maculis striisque nigricantibus, maculâ alarum albâ.*

White Bernicle with the vertex, back, wings, and tail brassy-brown, the neck with dusky spots and stripes, a white spot on the wings.

Anas Coromandeliana. *Gmel. Syst. Nat.* 1. 522. *Lath. Ind. Orn.* 2. 875.

Sarcelle de Coromandel. *Buff. Hist. Nat. Ois.* 9. 274. *Buff. Pl. Enl.* 949, 950.

Coromandel Teal. *Lath. Gen. Syn.* 6. 556.

A small species: beak dusky: top of the head black: the rest of it and the neck white, speckled with dusky black: the lower part of the neck transversely striated with fine dusky black lines: the upper parts of the wings and body are brown, glossed with green and reddish: the breast and belly are white: sides of the vent rust-coloured: legs black. The female is said to differ in having the white on the under parts mixed with grey, and the lines on the lower part of the neck broader and less distinct: the prevailing hue of the plumage is less brilliant than in the male. Inhabits Coromandel.

MAGELLANIC BERNICLE.

(Bernicla Magellanica.)

Be. *ferrugineo-fusca, corpore anteriore subtusque transversim variegato, tectricibus fasciâque alarum albis.*

Rusty-brown Bernicle with the anterior part of the body and beneath transversely variegated, the coverts and a fascia on the wing white.

Anas Magellanica. *Gmel. Syst. Nat.* 1. 505. *Lath. Ind. Orn.* 2. 836.

L'Oie des terres Magellaniques. *Buff. Hist. Nat. Ois.* 9. 68. *Buff. Pl. Enl.* 1006.

Magellanic Goose. *Lath. Gen. Syn.* 6. 443.

Inhabits the Straits of Magellan: length two feet: beak black; short: the head and neck are rusty brown: the upper part of the back, the breast, and all the under parts of the body to the vent are barred with ferruginous and black; near the vent grey: the lower part of the back and the tail are dusky: the wing-coverts are white: the quills dusky; the secondaries tipped with white, which forms a bar of that colour on the wing: the legs are yellow: the claws black.

WHITE-WINGED BERNICLE.

(Bernicla leucoptera.)

Be. *corpore albo, supra nigro transversim lineato, speculo alarum viridi, rostro pedibusque nigris.*

Bernicle with the body white, lineated transversely above with black, speculum of the wing green, the beak and legs black.

Anas leucoptera. *Gmel. Syst. Nat.* 1. 505. *Lath. Ind. Orn.* 2. 835.

L'Oie des Malouines. *Buff. Hist. Nat. Ois.* 9. 69.

White-winged Antarctic Goose. *Brown, Illust. pl.* 40.

Bustard Goose. *Lath. Gen. Syn.* 6. 440.

" Length from thirty-two to forty inches : beak scarcely two inches in length, and black : head, neck, lesser wing-coverts, and under parts of the body, white : the lower part of the neck behind, and as far as the middle of the back, crossed with numerous dusky black lines: side over the thighs the same: the greater wing-coverts black, tipped with white, forming a bar of white on the wing: at the bend a blunt knob: second quills part black, part white; prime ones dusky black : speculum dark green : the two middle tail-feathers black ; the rest white : the legs black. Inhabits Falkland Isles, where it is called the Bustard Goose. It stands pretty high upon its legs, which serve to elevate it above the tall grass, and its long neck to observe any danger : it walks and flies with great ease, and has not that disagreeble cackling cry peculiar to the rest of its kind : it generally lays six eggs : the flesh is wholesome, nourishing, and fattening."—*Latham.*

VARIEGATED BERNICLE.

(Bernicla variegata.)

Be. *corpore variegato, capite collo tectricibusque alarum albis, speculo alarum viridi, rostro pedibusque nigris.*

Bernicle with the body variegated, the head, neck, and wing-coverts white, the speculum of the wing green, the beak and legs black.

Anas variegata. *Gmel. Syst. Nat.* 1. 505. *Lath. Ind. Orn.* 2. 836.

Variegated Goose. *Lath. Gen. Syn.* 6. 441.

"Size of a large Duck: beak an inch and a half long, and black at the base and tip: head, and neck above half way, white: lower part of the neck and breast deep red-brown, beautifully mottled with white: over the thighs the same: all the under parts marked as the lower part of the neck: rump and vent ferruginous: wing-coverts white: secondary quills green: greater quills and tail black: legs black. Inhabits New Zealand: found at Duchy Bay, in April."—*Latham.*

ANTARCTIC BERNICLE.

(Bernicla Antarctica.)

Be. *corpore toto albo, rostro nigro, pedibus flavis.*

Bernicle with the entire body white, the beak black, the legs yellow.

Anas Antarctica. *Gmel. Syst. Nat.* 1. 505. *Lath. Ind. Orn.* 2. 835.

Antarctic Goose. *Lath. Gen. Syn.* 6. 442.

"This is smaller than a tame Goose: weight sixteen pounds: beak narrow, short, and black: the whole plumage of a dazzling snowy whiteness: on the bend of the wing a blunt knob: legs yellow. The female has the beak and legs the same as in the male; but the first is of a reddish flesh-colour: head, neck, and body black, crossed with transverse white lines; those of the head and neck are very minute, but grow broader as they proceed downwards: middle of the back plain black: wing-coverts white: on the bend of the wing a blunt knob: speculum green, edged outwardly with white: greater quills black: tail white: vent greenish-white: legs yellow. Inhabits Christmas Sound, in Terra del Fuego. Its flesh is unfit to be eaten."—*Latham.*

PAINTED BERNICLE.

(Bernicla picta.)

Be. *cinereo-nigricans, nigro transversim lineata, capite collo abdomine medio tectricibus fasciâque alarum albis.*

Dusky-ash Bernicle, transversely lineated with black, with the head, neck, middle of the abdomen, coverts, and stripe on the wing, white.

Anas picta. *Gmel. Syst. Nat.* 1. 504. *Lath. Ind. Orn.* 2. 836.

Painted Goose. *Lath. Gen. Syn.* 6. 443.

"Length twenty-eight inches: beak small, under an inch and a half in length: colour black: irides ash-colour: head and neck white, inclining to ash-

colour at the hind head: the feathers of the forehead produced forward on each side of the upper mandible: the lower part of the neck and breast white, marked across with numerous narrow black bars: the upper part of the back pale grey, barred in the same manner with black: the lower part of the back and scapulars dusky ash: wing-coverts white: at the bend of the wing a blunt knob: secondary quills dusky, with pale edges: prime quills and tail black: the middle of the belly, thighs, and vent white: over the thighs barred dusky and white: legs black. This was met with on Staaten Island, in January."—*Latham.*

The last four species greatly resemble each other: it is extremely probable that future observations may prove them to be mere variations in plumage, depending upon age or sex: they all inhabit the same region.

GREY-HEADED BERNICLE.

(Bernicla cana.)

BE. *ferrugineo-rufa, capite colloque griseis, speculo alarum viridi, humeris albis.*

Rusty-red Bernicle with the head and neck grey, wing speculum green, shoulders white.

Anas cana. *Gmel. Syst. Nat.* 1. 510. *Lath. Ind. Orn.* 2. 840.

L'Oie sauvage à tête grise de Coromandel. *Sonner. Voy. Ind.* 2. 220.

Grey-headed Goose. *Lath. Gen. Syn.* 6. 458. *Lath. Syn. Sup.* 273.

Less than the Brent Goose: beak dusky: head and neck pale grey: cheeks white: the breast, belly, and back are bright ash-colour, mixed with darker semi-circular lines: the wing-coverts are white: the secondary quills are green; the primaries black: the vent orange with a black bar: the tail and legs black: at the bend of the wing is a blunt knob. The female is less brilliant in colour, and is destitute of the white on the cheeks. It inhabits the Cape of Good Hope and the Coast of Coromandel.

B. Digitis anterioribus semipalmatis.
B. With the anterior toes half webbed.

BLACK AND WHITE BERNICLE?

(Bernicla? melanoleuca.)

Be? *alba, capite, collo, alis, caudâ, femoribusque nigris, rostro fulvo, pedibus flavis.*
White Bernicle with the head, neck, wings, tail, and thighs, black, the beak fulvous, the legs yellow.
Anas melanoleuca. *Lath. Ind. Orn. App.* lxix.
Black and White Goose. *Lath. Syn. Sup.* ii. 344.
Anser melanoleucus. *Vieil. 2 Edit. du Nouv. Dict. d'Hist. Nat. t.* 23. *p.* 344.

A native of New Holland, and greatly resembling the Black-necked Swan: its beak is very similar to that of the Wild Swan, extending far backwards, and taking in the eyes: it is yellowish at the base, red in

the middle: the point as well as the under mandible pale: the head, neck, beginning of the neck, greater part of the wings and quills, tail and thighs, are black; the rest of the plumage white: the legs are long and yellow, and the webs of the toes do not reach above half their length.

HAWKSBURY BERNICLE.

(Bernicla jubata.)

Be. *subcristata grisea, capite colloque ferrugineis, pectore undulato abdomine crissoque nigris.*

Subcrested Grey Bernicle with the head and neck rust-colour, the breast undulated, and the abdomen and rump black.

Anas jubata. *Lath. Ind. Orn. App.* lxix. *Vieil.* 2 *Edit. du Nouv. Dict. d'Hist. Nat. t.* 5. *p.* 110.

Hawksbury Duck. *Lath. Syn. Sup.* ii. 358. *pl. in front.*

Described and figured by Latham in his second Supplement to his Synopsis. "Length twenty-two inches: beak rather shorter than that of the Wigeon: colour black: head and neck chocolate-brown; at the back part of the nape the feathers are much lengthened, somewhat paler, and black at the ends: the upper part of the back and wing-coverts brownish ash-colour, the last palest: the lower part of the back, rump, tail, and middle of the belly, vent, under tail-coverts, and quills are black; but the sides of the breast and belly under the wings are grey, crossed with minute undulated lines: speculum of the wing

green, bounded on each side with white, but beneath the white is broader than above: the outer webs of the scapulars are black: but the most distinguishing character is, that the feathers of the breast have the ends of a pale silvery grey, and on each side of the grey a spot of blackish, giving that part an undulated appearance, spotted with black: the wings, when closed, do not reach quite to the end of the tail: the legs are brown. The female differs in having the vent white instead of black, and the green speculum on the wings smaller and less conspicuous. Inhabits New South Wales; frequently met with about Hawksbury River, and now and then observed perched upon trees."

SEMIPALMATED BERNICLE.

(Bernicla semipalmata.)

Be. *grisea, capite collo femoribusque fusco-nigris, collari uropygio corporeque subtus albis, pedibus semipalmatis.*

Grey Bernicle with the head, neck, and thighs brown-black, the collar, rump, and body beneath white, the legs half-webbed.

Anas semipalmata. *Linn. Trans.* iv. 103. *Lath. Ind. Orn. App.* lxix.

Anser semipalmata. *Vieil.* 2 *Edit. Nouv. Dict. d'Hist. Nat. t.* 23. *p.* 343.

Semipalmated Goose. *Lath. Syn. Sup.* ii. 347. *pl.* 139.

This singular bird, which probably constitutes a distinct genus, and appears to connect the Geese with the Cereopsis, is thus described by Latham in his

second Supplement. "Size nearly of a Wild Goose: beak brown, the cere at the base of it passing on each side to the eye: the head, neck, and thighs brownish-black: round the lower part of the neck a collar of white: the rump and under parts white: legs red: toes only webbed half way from the base: the external plumage does not seem to have any great peculiarity, but on dissection, the situation of the trachea offers a great singularity, for after passing on the fore part of the neck in the usual way, it forms several circumvolutions on the outside of the muscles of the breast, under the skin, before it enters the cavity." Inhabits New Holland: found in flocks, especially near Hawksbury River: its note is said to be agreeable, and the bird to perch on trees in the manner of the Whistling Duck.

STIRPS II.

Rostrum *basi vix altiùs quam latum,* cerâ *semitectum;* tarsi *elongati;* trachea ——— ?

Beak scarcely higher than broad at its base, half-covered with a *cere; tarsi* elongated; *trachea* ———.

There is but one genus known belonging to this stirps, which is at once distinguished from the rest of the Anatidæ, by the cere with which the basal half of the beak is furnished.

CEREOPSIS. CEREOPSIS.

Generic Character.

Rostrum brevissimum, validum, basi ferè altiùs quam longitudine, cerâ ad medium tectum, apice arcuato, truncato; mandibulâ inferiore apice dilatata.	*Beak* very short, strong, nearly as high at the base as its length, covered with a cere to the middle, the tip arched and truncated; the inferior mandible dilated at its tip.
Nares magnæ, apertæ, in medio rostri sitæ.	*Nostrils* large, open, placed in the middle of the beak.
Alæ calcar obtusum, armatæ.	*Wings* armed with an obtuse spur.
Pedes longiores, robusti, tetradactyli; *digiti* antici palmati, membranâ valdè emarginatâ; *ungues* validi, forti.	*Legs* long, robust, four-toed; the *anterior toes* palmated, the membrane very deeply notched; the *claws* stout and strong.

CEREOPSIS. Lath.? Vieil., Illig., Temm.

To the above characters may be added, that the wing-coverts are nearly as long as the quills, and the first quill-feather is rather shorter than the following. It may be observed that a note expressive of doubt is attached to the reference to Latham, &c., though not to that of Temminck; which may appear somewhat extraordinary, as the former author was

NEW-HOLLAND CEREOPSIS.

the first who described the bird, and gave the name to the genus; but he says, in his description, that the *head* is "*wholly covered, beyond the ears, with a rough skin or cere,*" and that the *legs* are "*stout, bare much above the knee;* the *toes* CLOVEN, and *the outer one connected to the middle at the base:*" which characters do not agree with those of the specimen "that is now in the British Museum," as the doctor informs us in the new edition of his Synopsis, nor with those of any other known bird; whereas the characters laid down by Temminck agree in every respect with the specimen in the collection above alluded to, and from which the accompanying figure was taken.

Latham placed this genus among the Grallæ; but as its feet are decidedly palmated, and its general habit seems to connect it with the birds of this family, I have removed it from thence to its present, apparently, more natural situation.

NEW HOLLAND CEREOPSIS.

(Cereopsis Novæ Hollandiæ.)

Ce. *cinereo-grisea, supra fuscescens, tectricibus alarum maculis aliquot nigris.*

Ashy-grey Cereopsis above brownish, with some of the wing-coverts spotted with black.

Cereopsis Novæ Hollandiæ. *Lath. Ind. Orn. Sup.* lxvii.

Anser griseus. *Vieil. 2 Edit. du Nouv. Dict. d'Hist. Nat. t.* 23. *p.* 338.

Cereopsis cendré. *Temm. Pla. Color. no.* 206.

New Holland Cereopsis. *Lath. Gen. Syn.* ii. 325. *pl.* 138 *.

"SIZE of a small Goose: length thirty-nine inches: neck long: bare part of the thigh *an inch and three quarters;* leg *seven inches and a half;* middle toe three inches and three quarters: the beak is black, three quarters of an inch in length; but from the tip to the gape an inch and a quarter; the under mandible shutting close under the upper: *from the base of the beak begins a bare, rough skin of a yellow colour, covering the whole of the head beyond the ears:* the plumage is pale ash-grey, but the neck and under parts are paler, the upper inclining to brown; some of the wing-coverts and axillaries have a dusky blackish spot near the ends, and the quills are dusky towards the tips: tail the same, consisting of sixteen feathers, and rounded in shape: at the bend of the wing a blunt knob: the second quills nearly as long as the prime ones: the legs are orange colour, but the fore part above the head, the toes and claws, are black: toes four in number, the three forward ones very stout and *cloven, but the exterior is connected to the middle one by a membrane at the base:* the sole of the foot is a solid knob on which the foot rests, and above this a *very small* fourth toe, which scarcely reaches the ground."

The above is Latham's description of this very singular and inelegant bird: there is a bad specimen at present in the British Museum, which answers to the above, except in those parts which are printed in Italics: the bird in question has the head *clothed* with ashy-grey feathers, and the basal half of the beak alone covered with a rugose or papillated cere: the legs are shorter than above stated, the tarsi scarcely

measuring six inches in length, and the bare space above the knee, less than one inch: the toes are not cleft, but, as before-mentioned, in the generic character, they are united by a membrane which has its edges very deeply notched; the hinder toe is not particularly small.

Native of New Holland. Three specimens only are known, which are deposited in the national collections of London, Paris, and Berlin.

STIRPS III.

Rostrum *basi latiùs quam altum, lateribus laminato-dentatis;* tarsi *breves;* pollex *simplex.*

Beak broader than high at its base, with its edges laminato-dentate; *tarsi* short; *hind toe* simple.

The Ducks of this stirps are generally of a slenderer form than those of the fifth; their beak is more equal, their neck and wings longer; the tarsi shorter and less compressed; the legs placed more forward on the abdomen, and the hind toe is destitute of a membrane. They walk better than those birds, but with less freedom than the Swans and Geese; swim well, but do not dive. They feed upon aquatic plants and their seeds, as well as upon fishes and other small animals.

TADORNA. SHIELDRAKE.

Generic Character.

Rostrum basi tuberculo elevato armatum, medio depressum, apice latum; mandibulâ superiore ad apicem lateratim sulcatâ, apice subrecurvatâ.	*Beak* armed with an elevated tubercle at its base, depressed in the middle, broad at the tip; the upper mandible laterally grooved near the tip, which is somewhat turned upwards.
Caput plumis tectum.	*Head* clothed with feathers.
Alœ simplices.	*Wings* simple.

TADORNA. Leach MSS., Fleming.
ANAS. Linn., Gmel., Lath., &c.

SHIELDRAKES have a small elevated tubercle at the base of the beak, which is flattened towards the middle and broad at the tip, where a slight recurvation takes place: they may be distinguished from the Musk-ducks, which also possess a tuberculated appendage, by having the head entirely clothed with feathers. There appear to be but few species hitherto discovered whose habits, as far as known, are similar: they nidificate in deserted rabbit-burrows, or holes in the ground.

RUDDY SHIELDRAKE.

(Tadorna rutila.)

TA. *rufa, collare remigibus rectricibusque nigris, speculo albo.*
Red Shieldrake with the collar, quills, and tail-feathers black, the speculum white.
Anas Casarca. *Linn. Syst. Nat. App.* iii. 224. *Gmel. Syst. Nat.* 1. 511. *Lath. Ind. Orn.* 2. 841.
Anas rutila. *Pallas. Nov. Comm. Petrop.* 14. 579.
Canard Kasarka. *Temm. man. d'Orn.* 535. *Id.* 2 *Edit.* ii. 832.
Ruddy Goose. *Lath. Gen. Syn.* 6. 456. *Lath. Syn. Sup.* 273.

LENGTH twenty-one inches: beak black: irides yellowish-brown: the top of the head and a band on the eyes white: the forehead, cheeks, and throat reddish-white: the neck red, encircled with a black collar: the prevailing colour of the body rusty-red: the rump and tail greenish-black: the quills black: the greater wing-coverts form a speculum at their tips of a pure white: the legs long, and blackish-brown. The female is destitute of the black collar on the neck: part of her head is white or whitish; forehead brown-red: the neck varied with white and ashy-brown: the red of the plumage less brilliant than in the male.

Inhabits the eastern countries of Europe, and several parts of Asia, particularly Persia and India: it also appears during its migrations in Austria, Hungary, and Germany, but does not frequent the sea-coasts. It makes its nest in the craggy banks of the Wolga, and other large rivers: the female lays eight

or nine white eggs: she sometimes constructs her nest in a hollow tree, or in the deserted holes of the Marmot. It will not bear confinement, several attempts having been made to reclaim it, but to no purpose. Its voice is said to resemble that of a Peacock, or rather the notes of a clarionet. Its chief food consists of aquatic plants, their seeds, insects, or small fishes.

BURROW SHIELDRAKE.

(Tadorna Bellonii.)

TA. *capite nigro-virescente, corpore albo variegato.*
Shieldrake with a greenish-black head, the body variegated with white.

Anas Tadorna. *Linn. Syst. Nat.* 1. 195. *Gmel. Syst. Nat.* 1. 506. *Raii, Syn.* 140. *A. Briss. Orn.* 6. 344. *Lath. Ind. Orn.* 2. 854.

Tadorne. *Buff. Hist. Nat. Ois.* 9. 205. *pl.* 14. *Buff. Pl. Enl.* 53. *Cuv. Reg. Anim.* 1. 537.

Canard tadorne. *Temm. man. d'Orn.* 536. *Id.* 2 *Edit.* ii. 833.

Shieldrake. *Alb. Birds,* 1. *pl.* 94. *Penn. Brit. Zool.* 2. 278. *Penn. Arct. Zool.* 2. 972. *Hayes, Brit. Birds,* 1. *pl.* 28. male. *Lath. Gen. Syn.* 6. 504. *Lath. Syn. Sup.* 275. *Lath. Syn. Sup.* ii. 353. *Don. Brit. Birds, pl.* 71. *Lew. Brit. Birds,* 7. *pl.* 248. *Walc. Syn.* 1. *pl.* 57. *Mont. Orn. Dict.* 2. *and Sup. Lath. Linn. Trans.* iv. 117. *pl.* 15. *f.* 8, 9. (trachea.) *Bew. Brit. Birds,* 2. 341.

Tadorna Bellonii. *Leach MSS.*

NOT quite two feet in length: the beak and its fleshy protuberance in front of a blood-red: the irides brown: the head and neck of a very dull green: the

BURROW SHIELDRAKE.

lower part of the neck, the wing-coverts, back, sides, rump, and base of the tail are pure white: the scapulars, a large band on the middle of the belly, the vent, quills, and the tips of the tail-feathers deep black: a broad red band surrounds the breast, and reaches upwards to the top of the back: the speculum of the wing is purple-green: the under tail-feathers are red: the legs are flesh-coloured. The female is smaller, and is nearly destitute of the fleshy protuberance on the base of the beak, on which part there is a small whitish spot: all the colours of the plumage are much duller than in the male: the pectoral band is narrower, and the black band which extends across the belly is very straight, and is often marked with larger white spots. The young of the first year have the face, the hinder and lower parts of the neck, the back, and the under parts of the body white: the head, cheeks, and nape brown, dotted with white: the breast bright reddish: the scapulars of a dusky ash, edged with bright ash: the lesser wing-coverts are white, edged with ash: the tail is tipped with ashy-brown: the beak is reddish-brown: the legs livid.

The structure of the trachea in the male of this bird is different from that of any other European species: this organ is furnished with a labyrinth, composed of two roundish bladders of a most delicate texture, one of which is larger than the other; both are uneven on the surface, and of so tender a fabric as scarcely to bear the pressure of the finger without fracture.

Inhabits the north and western parts of Europe,

and some parts of Asia, preferring the sea-coasts, and never from choice quitting its marine haunts. It is not uncommon on the British coasts, and remains with us all the year. The female makes her nest, and rears her young, under ground, in the rabbit-holes which are made in the sand-hills near the sea-shore: the nest is usually formed of the fine down plucked from her breast: she lays ten or twelve roundish white eggs, which are hatched in about thirty days, the male assisting in the process of incubation. Both sexes are very attentive to their young, and are said to carry them from place to place in their beaks, especially when the nest is situated at some distance from the water: if they happen to be interrupted during such times, the young are sheltered, and the parent birds fly off, and drop at a short distance, trailing themselves along the ground, and appear to struggle as if wounded, in order to tempt a pursuit after them, and should they succeed, they instantly return to their hapless charge. They will sometimes breed with the Common Duck, and, according to Montagu, bear confinement well, and appear to enjoy perfect health, provided they are allowed communication with a pond. Their principal food consists of sea-weed, small shell-fish, marine insects, and small fishes.

CRIMSON-BILLED SHIELDRAKE.

(Tadorna erythrorhyncha.)

Ta. *fusca subtus alba, pectore lateribus maculis fuscis, fasciâ alarum albâ alterâque subtus lutescente, caudâ nigrâ.*

Brown Shieldrake beneath white, the sides of the breast with brown spots, with a white band on the wings bounded below with yellowish, the tail black.

Anas erythrorhyncha. *Gmel. Syst. Nat.* 1. 517. *Lath. Ind. Orn.* 2. 855.

Crimson-billed Duck. *Lath. Gen. Syn.* 6. 507.

Length fifteen inches: the beak is of a fine deep crimson, and turns up a little at the end: the irides red: the plumage on the upper parts of the body of a dusky brown, with the forehead palest, and the edges of the feathers on the back very pale: on the wing is a narrow transverse white bar, with another of a buff colour beneath it: the chin, sides of the head, beneath the eyes, and all the under parts white, with the sides of the breast irregularly spotted with brown, and of the body, over the thighs, transversely marked with delicate brown lines: the tail is dusky-black: the legs the same. Inhabits the Cape of Good Hope.

GEORGIA SHIELDRAKE.

(Tadorna Georgica.)

TA. *cinereo-nebulosa, tectricibus alarum cinerascentibus, speculo alarum viridi albo marginato, remigibus rectricibusque nigricantibus.*

Ashy-clouded Shieldrake with the wing-coverts ashy, the speculum of the wing green, margined with white, the quills and tail-feathers dusky.

Anas Georgica. *Gmel. Syst. Nat.* 1. 516. *Lath. Ind. Orn.* 2. 847.

Georgia Duck. *Lath. Gen. Syn.* 6. 478.

"LENGTH twenty inches: beak two inches, turning up a little at the end; colour yellow; edges and tip dusky black: irides reddish-brown: the head and neck pale reddish-ash colour, lightest on the fore part, and minutely dashed with dusky streaks: the upper parts of the body pale reddish-ash colour, marked with dusky spots: scapulars the same, but deeper in colour: wing-coverts pale ash colour: speculum of the wings pale verdigris-green, edged with dusky, bounded above and beneath with a bar of white: sides pale cinereous, marked with spots of a deeper colour: quills and tail dusky: legs greenish-ash colour. This was found in South Georgia, the middle of January, and was a male bird: the flesh was thought good eating. From the drawings of Sir Joseph Banks." —*Latham.*

CRESTED SHIELDRAKE.

(Tadorna cristata.)

Ta. *cinerea cristata, fronte genis colloque postico cinerascentibus, gulâ juguloque flavescentibus maculis ferrugineis, speculo alarum cæruleo subtus albo.*

Ash-coloured crested Shieldrake with the front, cheeks, and neck behind ashy; the throat and jugulum yellowish, with rust-coloured spots; the speculum of the wing blue, beneath white.

Anas cristata. *Gmel. Syst. Nat.* 1. 540. *Lath. Ind. Orn.* 2. 870.

Crested Duck. *Lath. Gen. Syn.* 6. 543.

"Size of the Wild Duck: length twenty-eight inches: beak two inches long, black, and turns up at the end; edges of the upper mandible yellowish: irides red: top of the head dusky, lengthening into a crest at the hind head: forehead, sides under the eyes, and neck, pale ash colour: chin, and fore part of the neck, pale cream colour, transversely spotted round the lower part of the neck with dusky and ferruginous: back and wing-coverts deep dusky-ash colour: lower part of the back and rump pale rufous-ash colour: speculum of the wings fine blue, bounded below with white: quills and tail black; the last pointed in shape, and longer than the wings. Inhabits Staaten Land."—*Latham.*

CAIRINA. MUSK-DUCK.

Generic Character.

Rostrum basi tuberculo instructum.	*Beak* furnished with a tubercle at its base.
Facies lorumque nudæ, papillosæ.	*Face and lores* naked, warty.
Alæ tuberculatæ.	*Wings* tuberculated.

CAIRINA. Fleming.
MOSCHA. Leach MSS.
ANAS. Linn., Gmel., Ray, Briss., Lath., &c.

DISTINGUISHED from the other genera of this stirps by its naked and verrucose face and lores, and the tubercular appendage at the bend of the wing; which characters, combined with the knob at the base of the beak, appear fully to warrant its separation as a genus. Upon this point, as before observed under the observations upon the genus Chenalopex, I am likely to have many opponents; and it has been urged as one proof of the identity of this genus and the Ducks, that the common Musk-duck and the Mallard will associate together, and produce a mixed breed; but if it be a fact, as stated, that individuals belonging to the *same genus only* will mix and produce a hybrid breed, how are we to reconcile the

COMMON MUSK-DUCK.

anomaly with respect to the Canaryfinch, which will propagate with the Goldfinch, Sparrow, and Yellowhammer, birds belonging to different genera?

COMMON MUSK-DUCK.

(Cairina sylvestris.)

Ca. *corpore nigro viridi cæruleore nitente, tectricibus alarum albis.*

Musk-duck with a black body glossed with green or blue, the wing-coverts white.

Anas moschata. *Linn. Syst. Nat.* 1. 199. *Gmel. Syst. Nat.* 1. 515. *Briss. Orn.* 6. 313. *Lath. Ind. Orn.* 2. 846.

Anas sylvestris Brasiliensis. *Raii, Syn.* 148. 150.

Le Canard musqué. *Buff. Hist. Nat. Ois.* 9. 162. *pl.* 9. *Buff. Pl. Enl.* 989. *Cuv. Reg. Anim.* i. 537.

Muscovy Duck. *Alb. Birds,* 3. *pl.* 97, 98. *Lath. Gen. Syn.* 6. 476. *Lath. Linn. Trans.* iv. 113. *pl.* xiv. *f.* 5, 6. *Lath. Syn. Sup.* ii. 348. *Bew. Brit. Birds,* ii. 320.

Much larger than the Common Duck, being upwards of two feet in length: in its wild state it is described as being entirely of a black colour, with blue and green reflections, and white wing-coverts: domesticated, it varies much: its usual appearance is as follows: the tip of the beak and nostrils brown; the rest of it and the naked skin at its base and round the eyes red: the crown of the head slightly tufted, and black: the cheeks, throat, and fore part of the neck white, irregularly marked with black: the belly, from the breast to the thighs, white: the general

colour of the rest of the plumage deep brown, darkest and glossed with green on the back, rump, quills, and tail, the two outer feathers of the latter and the three first primaries being white: the legs and feet are short, thick, and red. In the female this naked carunculated skin is of a paler red, and does not cover so large a portion of the head as in the male: she is also somewhat smaller.

The trachea of this bird, according to Dr. Latham, is stout, nearly equal in diameter, but a trifle smaller towards the bottom; the bony arch finishes the bottom part, and appears as if furnished with rings, but they are not moveable: the orbicular labyrinth is attached to the side of it; its surface is universally rough and irregularly furrowed with fine indented lines; the opposite side runs into a pear shape, and is placed obliquely, with the point lowest, but is flattened considerably on the surface: the bony arch is on this side smooth, having no appearance of rings, and is bent at a small angle from the trachea, although it constitutes a continuance of it.

Musk-ducks are supposed to have been originally natives of South America, where they are still found wild: they are now tolerably common in a domestic state in most European countries. According to Buffon they nestle on the trunks of old trees, and when the young are hatched, the mother takes them one after another by the beak and throws them into the water. Their eggs are larger and rounder than those of the Duck, and are frequently tinged with green: these birds are more prolific and sit oftener than other Ducks, and their flesh, which is high

flavoured, is much esteemed. They have obtained the name of Musk-duck from their musky smell, which proceeds from the fluid secreted from the glands on the rump. They are naturally very wild and shy, but when kept in confinement they are more docile, and will frequently associate and produce a mixed breed with the Common Duck.

NILOTIC MUSK-DUCK.

(Cairina Nilotica.)

Ca. *albida maculis canis, pectoris lateribus abdomineque cano lineatis.*

Whitish Musk-duck with hoary spots, the sides of the breast and the abdomen striped with hoary.

Anas Nilotica. *Gmel. Syst. Nat.* 1. 508. *Lath. Ind. Orn.* 2. 846.

Nilotic Goose. *Lath. Gen. Syn.* 6. 488.

" Size between the Pintail Duck and the Common Goose, but stands higher on its legs. Nail of the beak hoary; the margin of it bounded by a callus, which is a little elevated, equal, and of a purplish blood-colour; a second encompasses the base, a little elevated, of a dull purple, and has four warts, two on each side: irides yellow: throat, sides of the neck, crown, and a line behind the eyes, whitish, spotted with hoary or cinereous: breast, belly, and thighs, whitish-brown, crossed with dusky transverse lines: sides of the breast and belly marked with oblong and hoary lines: tail longish, rounded in shape: legs

red: claws black. Inhabits the Nile, in Upper Egypt. It is easily tamed, and lives among other domestic poultry.—*Latham.*

ROYAL MUSK-DUCK?

(Cairina? regia.)

CA? *corpore cæruleo subtus fusco, collari albo.*
Musk-duck? with the body cærulean, beneath brown, the collar white.
Anas regia. *Gmel. Syst. Nat.* 1. 508. *Lath. Ind. Orn.* 2. 847.
Royal Duck. *Lath. Syn. Sup.* ii. 349.

RATHER larger than the Common Wild Duck: it has a compressed caruncle on the forehead, forming a crest or comb: all the upper parts of the plumage are of a fine blue, the under grey: on the neck is a beautiful white collar. Inhabits Chili.

ANAS. DUCK.

Generic Character.

Latin	English
Rostrum basi glabrum, depressum, latum, ad apicem rectum, obtusum.	*Beak* simple at the base, depressed, broad, straight, towards the tip, obtuse.
Nares ovales, parvæ.	*Nostrils* oval, small.
Cauda mediocris, *rectricibus* æqualibus, basi plerumque pennis recurvatis instructis.	*Tail* mediocral, its *feathers* equal, the base often furnished with recurved plumes.

ANAS Auctorum.

DUCKS may be distinguished from the two preceding genera of this stirps by the absence of the fleshy protuberance on the base of the beak peculiar to them: from the Shovelers, by the beak not being expanded towards the tip; from the Pintails and Wigeons by the bluntness of the tail-feathers, and from the Teals by the shape of their beak and their larger size.

WILD DUCK

(Anas Boschas.)

AN. *cinerea, rectricibus intermediis maris recurvatis, torque albo.*
Ash-coloured Duck with the intermediate tail-feathers of the male recurved, the neck with a white ring.

Anas Boschas. *Linn. Syst. Nat.* 1. 205. *Gmel. Syst. Nat.* 1. 538. *Lath. Ind. Orn.* 2. 850.

Anas fera. *Briss. Orn.* 6. 318.

Canard sauvage. *Buff. Hist. Nat. Ois.* 9. 115. *pl.* 7, 8. *Buff. Pl. Enl.* 776, 777. *Temm. man. d'Orn.* 537. *Id.* 2 *Edit.* ii. 835.

Le Canard ordinaire. *Cuv. Reg. Anim.* 1. 537.

Wild Duck, or Mallard. *Penn. Brit. Zool.* 2. 279. *Penn. Arct. Zool.* 2. 494. *Lath. Gen. Syn.* 6. 489. *Alb.* 2. *pl.* 10. *Walc. Syn.* 1. *pl.* 79. *Don. Brit. Birds,* 5. *pl.* 124. *Lewin. Brit. Birds,* 7. *pl.* 246. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 327. *Lath. Syn. Sup.* 2. 351. *Lath. Linn. Trans.* iv. 112. *pl.* 13. *f.* 10. (trachea.) *Wils. Amer. Orn.* viii. *p.* 112. *pl.* xc. *f.* 7. male. *Bing. Anim. Biog.* ii. 336.

VARIETY, a.—Anas domestica. *Linn. Syst. Nat.* 1. 206. *Raii, Syn.* 150. *Briss. Orn.* 6. 308.

Boschas major. *Briss. Orn.* 6. 326. *A.*

Boschas major grisea. *Briss. Orn.* 6. 326.

Boschas major nævia. *Briss. Orn.* 6. 327.

Tame Duck. *Alb. Birds,* 2. *pl.* 99. *Lath. Gen. Syn.* 6. 494. *Bew. Brit. Birds,* 2. 333.

VARIETY, b.—Anas adunca. *Linn. Syst. Nat.* 1. 206. *Gmel. Syst. Nat.* 1. 538.

Anas rostro incurvo. *Briss. Orn.* 6. 311. *Raii, Syn.* 150.

Hook-billed Duck. *Alb. Birds,* 2. *pl.* 96, 97. *Lath. Gen. Syn.* 6. 495. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 338.

ABOUT twenty-two inches in length: the beak is greenish-yellow: the irides reddish-brown: the head

and neck are very deep green: at the base of the neck is a white collar: the upper parts of the plumage are striped with very fine zigzags of ashy-brown and greyish-white: the breast is very deep chesnut: the rest of the under parts are grey-white, rayed with very fine ashy-brown zigzags: the speculum of the wing is violet-green, edged above and below with a white band: the four middle tail-feathers are recurved: the legs are orange. The female is less: all the plumage is varied with brown on a greyish ground: the throat is white: a whitish band, spotted with brown, passes above the eyes, and a dusky one through them: the speculum resembles that of the male, but is not shaded with violet: the four middle tail-feathers are straight: the beak is greyish-green: the irides brown. The young males, before they moult, resemble the females. It varies much in colour. The trachea of the male has a globular or labyrinthic cavity, about three quarters of an inch in diameter, just before the entrance into the lungs.

In a domestic state some individuals appear in nearly the same plumage as the wild ones; others vary greatly from them, as well as from each other, and are marked with nearly every colour; but all the males, or drakes, still retain the curled feathers of the tail. The Tame Duck is, however, of a more dull and less elegant form and appearance than the Wild, domestication having deprived it of its lofty gait, long tapering neck, and sprightly eyes.

Wild Ducks inhabit all the northern countries of the globe, and are found throughout the greater portion of Europe; in the arctic regions they appear to

be most abundant; they are common in Britain, and breed on many of our rivers and lakes, sometimes at a considerable distance from the water. They scrape together a heap from such vegetables as are contiguous for a nest, and lay from ten to eighteen bluish-white eggs. They have been known sometimes to lay their eggs in a high tree, in a deserted magpie or crow's nest; and an instance has likewise been recorded of one being found at Etchingham, in Sussex, sitting upon nine eggs, in an oak, at the height of twenty-five feet from the ground; the eggs were supported by some small twigs placed cross-ways. The female, during the period of incubation, usually plucks the down from her breast to line her nest, and frequently covers the eggs when she leaves them. Wild Ducks pair; but when domesticated become polygamous.

The flesh of the Wild Duck is in general and high estimation; and the ingenuity of man, in every country where it frequents, has been employed in inventing stratagems to capture these artful and wary birds, and procure a delicacy for the table. A few of the most simple and effective of their contrivances may be mentioned.

Wilson relates that in America the following singular methods are used: "In some ponds frequented by these birds, five or six wooden figures, cut and painted so as to represent Ducks, and sunk, by pieces of lead nailed to their bottoms, so as to float at the usual depth on the surface, are anchored in a favourable position for being raked from a concealment of brush, &c. on shore. The appearance of these

usually attracts passing flocks, which alight and are shot down. Sometimes eight or ten of these painted wooden Ducks are fixed in a frame in various swimming postures, and secured to the bow of the gunner's skiff, projecting before it in such a manner that the weight of the frame sinks the figures to their proper depth; the skiff is then dressed with sedge or coarse grass in an artful manner, as low as the water's edge; and under cover of this, which appears like a covey of Ducks swimming by a small island, the gunner floats down sometimes to the very skirts of a whole congregated multitude, and pours in a destructive and repeated fire of shot amongst them. In winter, when detached pieces of ice are occasionally floating in the river, some of the gunners on the Delaware paint their whole skiff or canoe white, and laying themselves flat at the bottom, with their hand over the side, silently managing a small paddle, direct it imperceptibly into or near a flock, before the Ducks have distinguished it from a floating mass of ice, and generally do great execution among them. A whole flock has sometimes been thus surprised asleep, with their heads under their wings. On land, another stratagem is sometimes practised with great success: a large tight hogshead is sunk in the flat marsh, or mud, near the place where Ducks are accustomed to feed at low water, and where, otherwise, there is no shelter; the edges and top are artfully concealed with tufts of long coarse grass and reeds, or sedge. From within this the gunner, unseen and unsuspected, watches his collecting party,

and when a sufficient number offers, sweeps them down with great effect."

But these methods, which require much watching, toil, and fatigue, are vastly inferior to the decoys used in England, particularly in the fens of Lincolnshire, where many thousands are taken at a time. The following is Bewick's circumstantial account of them.

"In the lakes where they resort, the most favourite haunts of the fowl are observed: then in the most sequestered part of this haunt they cut a ditch about four yards across at the entrance, and about fifty or sixty yards in length, decreasing gradually in width from the entrance to the farther end, which is not more than two feet wide. It is of a circular form, but not bending much for the first ten yards. The banks of the lake, for about ten yards on each side of this ditch (or pipe, as it is called) are kept clear from reeds, coarse herbage, &c. in order that the fowl may get on them to sit and dress themselves. Across this ditch, poles on each side, close to the edge of the ditch, are driven into the ground, and the tops bent to each other, and tied fast. These poles at the entrance form an arch, from the top of which to the water is about ten feet. This arch is made to decrease in height, as the ditch decreases in width, till the farther end is not more than eighteen inches in height. The poles are placed about six feet from each other, and connected together by poles laid lengthwise across the arch and tied together. Over them a net with meshes sufficiently small to permit

the fowl getting through is thrown across, and made fast to a reed fence at the entrance, and nine or ten yards up the ditch, and afterwards strongly pegged to the ground. At the farther end of the pipe a tunnel net, as it is called, is fixed, about four yards in length, of a round form, and kept open by a number of hoops about eighteen inches in diameter, placed at a small distance from each other to keep it distended. Supposing the circular bend of the pipe to be to the right, when you stand with your back to the lake, on the left-hand side a number of reed fences are constructed, called shootings, for the purpose of screening from sight the *decoy-man*, and in such a manner, that the fowl in the decoy may not be alarmed while he is driving those in the pipe: these shootings are about four yards in length, and about six feet high, and are ten in number. From the end of the last shooting a person cannot see the lake, owing to the bend of the pipes: there is then no farther occasion for shelter. Were it not for these shootings, the fowl that remain about the mouth of the pipe would be alarmed, if the person driving the fowl already under the net should be exposed, and would become so shy as to forsake the place entirely. The first thing the decoy-man does when he approaches the pipe is to take a piece of lighted turf or peat, and hold it near his mouth, to prevent the fowl smelling him. He is attended by a dog taught for the purpose of assisting him: he walks very silently about half-way up the shootings, where a small piece of wood is thrust through the reed fence, which makes an aperture just sufficient to see if any fowl

are in; if not, he walks forward to see if any are about the mouth of the pipe. If there are, he stops and makes a motion to his dog, and gives him a piece of cheese or something to eat; upon receiving it he goes directly to a hole through the reed fence, and the fowl immediately fly off the bank into the water; the dog returns along the bank between the reed fences and the pipe, and comes out to his master at another hole. The man now gives him another reward, and he repeats his round again, till the fowl are attracted by the motions of the dog, and follow him into the mouth of the pipe. This operation is called working them. The man now retreats farther back, working the dog at different holes till the fowl are sufficiently under the net: he now commands his dog to lie down still behind the fence, and goes forward to the end of the pipe next the lake, where he takes off his hat, and gives it a wave between the shooting: all the fowl under the net can see him, but none that are in the lake can. The fowl that are in sight fly forward, and the man runs forward to the next shooting and waves his hat, and so on, driving them along till they come to the tunnel net, where they creep in: when they are all in he gives the net a twist, so as to prevent their getting back: he then takes the net off from the end of the pipe with what fowl he may have caught, and takes them out one at a time, and dislocates their necks, and hangs the net on again, and all is ready for working again. In this manner five or six dozen have been taken at one drift. When the wind blows directly in or out of the pipes, the

fowl seldom work well, especially when it blows in. If many pipes are made in the lake, they are so constructed as to suit different winds. The better to entice the fowl into the pipe, hempseed is strewed occasionally in the water. The season allowed by act of parliament for catching these birds in this way is from the latter end of October till February.

"Particular spots or decoys, in the fen countries, are let to the fowlers at a rent of from five to thirty pounds per annum; and Pennant instances a season in which thirty-one thousand two hundred Ducks, including Teals and Wigeons, were sold in London only, from ten of these decoys, near Wainfleet, in Lincolnshire. Formerly, according to Willoughby, the Ducks, while in moult and unable to fly, were driven by men in boats furnished with long poles, with which they splashed the water between long nets stretched vertically across the pools, in the shape of two sides of a triangle, into lesser nets placed at the point, and in this way, he says, four thousand were taken at one driving in Deeping fen; and Latham has quoted an instance of two thousand six hundred and forty-six being taken in two days, near Spalding in Lincolnshire; but this manner of catching them while in moult is now prohibited."

Prodigious numbers of these birds are also taken by decoys in Picardy in France, particularly on the river Somme. It is customary there to wait for the flocks' passing over certain known places; when the fowler, having ready a wicker cage containing a quantity of tame birds, lets out one at a time, which enticing the passengers within gun-shot, five or six are

often killed at once by an expert marksman. They are also taken by means of hooks baited with raw meat, which the birds swallow while swimming on the water.

Other methods of catching Ducks are peculiar to certain nations: one of these, from its singularity, seems worth mentioning. A person wades into the water up to the chin; and, having his head covered with an empty calabash, approaches the place where the birds are, which, not regarding an object of this kind, suffer the man freely to mix with the flock; when he has only to pull them by the legs under the water, one after another, and fix them to his belt till he is satisfied, returning as unsuspected by the remainder as when he first came among them. This curious method is frequently practised on the river Ganges, the earthen vessels of the Gentoos being then used instead of calabashes. These vessels are what the Gentoos boil their rice in: after having been once used, they are looked upon as defiled, and are thrown into the river as useless; and the Duck-takers find them convenient for this purpose, as the Ducks, from seeing them constantly float down the stream, pay no attention to them.

To this long account may be added, that in China the rearing of Ducks is an object of great moment. In that country the major part of them are hatched by artificial heat: the eggs, being laid in boxes of sand, are placed on a brick hearth, to which is given a proper heat during the time required for hatching. The ducklings are fed with craw-fish and crabs, boiled and cut small, and afterwards mixed with boiled rice; and in about a fortnight they are able to shift for

themselves. The Chinese then provide them with an old stepmother, who leads them where they are to find provender, being first put on board a sampane, or boat, which is destined for their habitation, and from which the whole flock, often, it is said, to the amount of three or four hundred, go out to feed, and return at command. This method is used nine months out of the twelve, for in the colder months it does not succeed, and is so far from a novelty, that it may be every where seen; but more especially about the time of cutting the rice, and gleaning the crops, when the masters of the duck-sampanes row up and down the river, according to the opportunity of procuring food, which is found in plenty at the ebb tide, on the rice plantations, as they are overflowed at high water.

CURVE-BILLED DUCK.

(Anas curvirostra.)

An. *atra, rectricibus intermediis maris recurvatis, gulâ maculâ ovali albâ, rostro incurvo.*

Dusky Duck with the intermediate tail-feathers of the male recurved, the throat with a white oval spot, the beak bent down.

Anas curvirostra. *Gmel. Syst. Nat.* 1. 537. *Lath. Ind. Orn.* 2. 852.

Curve-billed Duck. *Lath. Gen. Syn.* 6. 496.

Apparently distinct from the Wild Duck, than which it is rather larger: its beak is similar, but bent

downwards: irides fulvous: the prevailing colour of the plumage is deep black, with the quills and under parts dull: the head, neck, and rump are slightly tinged with shining grey: on the throat is an oval white spot: the five outer quills are white; the rest black: the exterior secondary quill is margined with white at its tip on the outer edge; but the outer margins in general have a blue-black gloss, and form a speculum of that colour on the wing: the tail as in the Wild Duck, with the four middle feathers recurved. Described by Pallas: its native country is unknown.

CHINESE DUCK.

(Anas galericulata.)

AN. *cristâ dependente, dorsoque postico utrinque pennâ recurvatâ compressâ elevatâ.*

Duck with a depending crest, the back behind with a recurved, compressed, elevated feather.

Anas galericulata. *Linn. Syst. Nat.* 1. 206. *Gmel. Syst. Nat.* 1. 539. *Lath. Ind. Orn.* 2. 871.

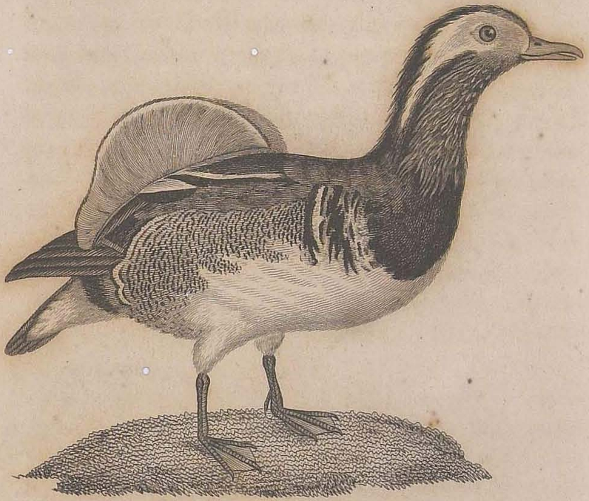
Querquedula sinensis. *Briss. Orn.* 6. 450.

Sarcelle de la Chine. *Buff. Hist. Nat. Ois.* 9. 276. *pl.* 19. *Buff. Pl. Enl.* 805, 806.

Le Canard de la Chine. *Cuv. Reg. Anim.* 1. 538.

Chinese Teal. *Edw. Glean. pl.* 102. *Lath. Gen. Syn.* 6. 548.

THIS remarkable bird is "somewhat less than a Wigeon: the beak of a dull red: irides hazel: the hind part of the head and neck full of feathers, and



Griffith

CHINESE DUCK.

elongated into a flattish crest: the top of the head, down the middle of the crown, of a greenish-black: between the beak and eye pale rufous; behind the eye white, passing backwards into the crest, which is of a dark glossy green: the feathers round the upper part of the neck, all round, are long and pointed, like those of a Cock, and of a dull orange colour: the lower part of the neck and upper part of the breast chesnut: at the bend of the wing are three transverse streaks of black, and two of white alternate: the scapulars are black, margined with white: the back and rump dusky-brown, glossed in some parts with blue-green: on the wings a speculum, or glossy patch of blue-green, bounded below with white: the quills dusky brown, edged near the ends with pale grey: one of the second quills much broader on one web than on the other, and curves upwards in an elegant manner, standing upright when the wing is closed; the broader web of a fine pale brownish-red, tipped with black; the under, or narrower one, dusky black: the tail pointed, of a dusky brown, fringed with blue-green: the sides of the body of a brownish cream-colour, transversely crossed with fine black lines: the feathers over the thighs barred with black and white at the ends: the lower parts of the breast and belly are white: legs orange-colour: the female is not unlike that of the Summer Duck, but has two bars of white on the wing: the breast seems more clouded with brown, and the spots on it are not of the triangular shape, as in the Summer Duck, but rounded."
—*Latham.*

This elegant species is a native of China and Japan, where it is often kept for the sake of its beauty. It does not appear to be very common. It is frequently brought alive to England, but without the greatest care, soon perishes: but little is known, however, of its manners.

SUMMER DUCK.

(Anas sponsa.)

AN. *cristâ dependente duplici viridi cæruleo alboque variâ.*

Duck with a double dependent crest varied with green, blue and white.

Anas sponsa. *Linn. Syst. Nat.* 1. 207. *Gmel. Syst. Nat.* 1. 539. *Lath. Ind. Orn.* 2. 871.

Anas æstiva. *Briss. Orn.* 6. 351. *pl.* 32. *f.* 2.

Yztacton Yahauhqui. *Raii, Syn.* 176.

Beau Canard huppé. *Buff. Hist. Nat. Ois.* 9. 254. *Buff. Pl. Enl.* 980, 981.

Le Canard de la Caroline. *Cuv. Reg. Anim.* 1. 538.

Summer Duck. *Catesby, Carol.* 1. *pl.* 97. *Edw. Glean. pl.* 101. *Penn. Arct. Zool.* 2. 493. *Lath. Gen. Syn.* 6. 546. *Wils. Amer. Orn. v.* viii. *p.* 97. *pl.* lxx. *f.* 3.

LENGTH nineteen inches: beak red, with the base of the upper mandible yellow; the tip and ridge black: the irides hazel: the occiput greatly crested; the feathers of the crest and head are glossy green, tinged with purple; the former are very long and dependent: from the nostrils a white line passes on each side over the eye to the occiput, and another

from the back of the eye to the same part: the occiput, beneath the crest, black: the chin and throat are white, forming a slender curve round the gape, and ending in a point at the back of the eye; below this is a second curve, also tending towards the nape: the neck, below the crest, and the breast, are of a ruddy vinaceous hue, inclining to brown behind: the breast is marked with triangular spots of white; from thence, as far as the vent, white: the feathers which fall over the wings are barred with black and white: the back is glossy brown: the scapulars are glossed with blue-green; the secondaries with blue: the sides of the body are finely barred with dusky and cream-colour: the feathers on the thighs crossed with black and white at the ends: the sides of the vent purplish-chesnut: the legs orange. The female is less: the feathers round the beak and eye white, passing backwards in a streak behind, and ending in a point: chin and throat also white: fore part of the neck, and breast, brown, marked with triangular white spots: the back, tail, and wings brown: the coverts of the last and secondaries mixed with blue-green: the tips of the lower coverts white, forming a bar on the wing: the quills dusky, edged within with green, and near the tips without with grey: the belly white.

A most beautiful species, inhabiting Mexico and other parts of North America; migrating north in the summer: it appears about New York in the spring, and breeds there, making its nest in the decayed hollows of trees, or in craggy rocks of the rivers: in Louisiana it is found throughout the year. It rarely visits the sea-shore, or salt marshes, its favourite haunts being

the solitary, deep, and muddy creeks, ponds, and mill-dams of the interior of the country, making its nest frequently in old hollow trees that overhang the water; sometimes among the branches: it usually lays thirteen eggs, which are, as in the case of the Wild Duck, usually covered with down: the eggs are oval, the surface exceedingly fine grained, and of the highest polish, and slightly yellowish.

This bird seldom flies in flocks of more than three or four individuals together, and most commonly in pairs, or singly. The common note of the male is *peet, peet;* but when on the watch he sees danger, he makes a noise not unlike the crowing of a young Cock, resembling *oe eek! oe eek!* Their food consists chiefly of acorns, seeds, and insects: they are often tamed, and will breed in confinement.

TREE DUCK.

(Anas arborea.)

AN. *grisea, capite subcristato, abdomine albo nigroque maculato.*
Griseous Duck with the head slightly crested, the abdomen spotted with black and white.

Anas arborea. *Linn. Syst. Nat.* 1. 207. *Gmel. Syst. Nat.* 1. 540. *Lath. Ind. Orn.* 2. 852.

Auas fistularis Jamaicensis. *Briss. Orn.* 6. 403. *Raii, Syn.* 192.

Black-billed Whistling Duck. *Edw. Glean. pl.* 193. *Penn. Arct. Zool.* 2. 492. *Lath. Gen. Syn.* 6. 499.

Less than the Wild Duck: beak black: irides hazel: the crown of the head dusky, with a slight crest at its back, where it is of a reddish-brown: the hind part of the neck, the back, and scapulars, brown; the feathers of the two last edged with rufous: the wing-coverts rufous, spotted with black; the quills and tail dusky: the rump and upper tail-coverts dark rufous-brown: the sides of the head and throat white: the fore part of the neck white, spotted with black: the breast pale rufous, spotted with black: the belly, thighs, and vent similar in colour to the fore part of the neck, but the spots less and more numerous on the sides: the legs are long and lead-coloured: the claws black.

This species inhabits the West India islands and the adjacent continent of America. It is said to make a whistling kind of noise, and to build its nest in trees.

AUTUMNAL DUCK.

(Anas autumnalis.)

An. *grisea, remigibus caudâ ventreque nigris, speculo alarum fulvo alboque.*

Griseous Duck with the quills, tail, and belly black, the speculum of the wings fulvous and white.

Anas autumnalis. *Linn. Syst. Nat.* 1. 205. *Gmel. Syst. Nat.* 1. 537. *Lath. Ind. Orn.* 2. 852.

Anas fistularis Americana. *Briss. Orn.* 6. 400. *pl.* 38. *f.* 1.

Siffleur à bec rouge et narines jaunes. *Buff. Hist. Nat. Ois.* 9. 183. *Buff. Pl. Enl.* 826.

Red-billed Whistling Duck. *Edw. Glean. pl.* 194. *Lath. Gen. Syn.* 6. 498. *Lath. Syn. Sup.* 274.

Length twenty-one inches: beak red, its hook black: irides hazel: the crown of the head chesnut: the nape streaked with the same: the sides of the head and the throat dirty white: the lower part of the neck rufous-chesnut: the breast and between the shoulders ashy-yellow; the breast palest, with the edges of all the feathers yellowish: the back and scapulars chesnut: the inner wing-coverts rufo-cinereous: greater coverts cinereous: the quills black, with the base of most of them white, forming an oblique bar of that colour on the wing: the lower part of the back, the rump, tail, belly, and under the wings are black: the under tail-coverts are mottled with black and white: the legs yellow: claws black.

Inhabits the West India islands and parts adjacent: they are very common at New Grenada, in South America, where the inhabitants frequently keep them in the farm-yards; but they are very quarrelsome, and often fly away.

FALCATED DUCK.

(Anas falcaria.)

An. *cristata, corpore cano fuscoque variegato, pectore undulato, fronte gulâ torque colli fasciâque alarum albis.*

Crested Duck with the body variegated with hoary and brown, the breast undulated, the forehead, throat, ring on the neck, and band on the wing white.

Anas falcaria. *Gmel. Syst. Nat.* 1. 521. *Lath. Ind. Orn.* 2. 860.
Falcated Duck. *Penn. Arct. Zool.* 2. 574. *pl.* 23. *Lath. Gen. Syn.* 6. 516.

Described by Latham from a specimen in his collection: it is, says he, the "size of a Wigeon: length one foot six inches: the beak an inch and a half long, and black: the feathers of the back part of the head, and a little way down the neck, long and crested: the forehead and crown dull ferruginous; in the middle, near the base of the beak, a spot of white: round the eyes, hind head, and crest shining green, varied with copper, especially on the temples: chin white: beneath this two collars, the first of a greenish-black, and springs from the crest; the lower is white: the rest of the neck and breast cinereous, undulated with brown: back grey, the upper part obscurely lineated with a paler colour: the belly dotted with grey and white: vent black, the sides of it white, divided transversely by a black band: shoulders grey, and somewhat undulated: scapulars grey, and curve inwards at the ends: speculum of a fine blue-green; above it a white band: wings as long as the tail: legs lead colour."

Native of the eastern parts of Siberia; also of Kamtschatka and China.

SPANISH DUCK.

(Anas viduata.)

An. *fusca, capitis antico albo, postico nigro, pedibus cæruleis.*
Brown Duck with the head white in front and black behind, the legs blue.
Anas viduata. *Linn. Syst. Nat.* 1. 205. *Gmel. Syst. Nat.* 1. 536. *Lath. Ind. Orn.* 2. 858.
Canard à face blanche de Maragnon. *Buff. Hist. Nat. Ois.* 9. 255. *Buff. Pl. Enl.* 808.
Spanish Duck. *Penn. Genera. Birds,* 65. *pl.* 13. *Lath. Gen. Syn.* 6. 525. *Lath. Syn. Sup.* 275.

Length about twenty inches: beak and irides black: the forehead, cheeks, chin, and back part of the head pure white: crown black: on the neck a collar of the same: the wings pale brown, without any speculum: the back and breast bright rust colour, crossed with narrow dusky lines: the belly whitish brown, spotted with black: the tail cuneiform; black: the legs bluish.

A beautiful species: it inhabits the lakes of Carthagena in South America: it has a whistling note.

GADWALL DUCK.

(Anas strepera.)

AN. *corpore suprà fusco pallido undulato, subtus griseo alboque vario, speculo alarum albo, anticè rufo marginato.*

Duck with the body above brown, palely undulated, beneath varied with grey and white, the speculum of the wing white, edged with red in front.

Anas strepera. *Linn. Syst. Nat.* 1. 200. *Gmel. Syst. Nat.* 1. 520. *Briss. Orn.* 6. 339. *pl.* 33. *f.* 1. *Lath. Ind. Orn.* 2. 859.

Anas platyrhynchos. *Raii, Syn.* 145. *A.*

Chipeau. *Buff. Hist. Nat. Ois.* 9. 187. *pl.* 12. *Buff. Pl. Enl.* 958.

Canard Chipeau, ou ridenne. *Temm. man. d'Orn.* 539. *Id.* 2 *Edit.* ii. 837. *Cuv. Reg. Anim.* 1. 538.

Gadwall, or Grey. *Penn. Brit. Zool.* 2. 288. *Penn. Arct. Zool.* 2. 575. *Lath. Gen. Syn.* 6. 525. *Lath. Syn. Sup.* ii. 353. *Lath. Linn Trans.* iv. iii. *pl.* 13. *f.* 7, 8. (trachea.) *Lew. Brit. Birds,* 7. *pl.* 258. *Walc. Syn.* 2. *pl.* 68. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 350. *Wils. Amer. Orn.* viii. *p.* 120. *pl.* xci. *f.* 1.

TWENTY inches in length: beak black: irides bright brown: the head and neck grey-brown, spotted with brown: the under part of the neck, the back, and breast are marked with black lunules: the scapulars and sides are barred with zigzags of white and blackish: the lesser wing-coverts are chesnut-red: the greater coverts, rump, and under tail-coverts are deep black: the speculum of the wing is pure white: the tarsi and toes are orange; the membranes blackish. The female has the feathers of the back blackish-brown, edged with bright red: the breast is reddish-

brown, with black streaks: there are no zigzag stripes on the sides: the rump and the lower tail-coverts are greyish.

In the male the inferior larynx is dilated a little before, and forms, on the left side, a bony protuberance of a similar form with that of the Wild Duck, but smaller: the rings of which the tracheal tube is composed are narrower than in that bird, but towards the base of the trachea they become broader, and then resume a smaller diameter at a little distance from the inferior larynx.

The Gadwall inhabits the northern parts of the globe, visiting this country in the winter, though sparingly: according to Temminck it is very abundant in Holland, and breeds in the marshes and among rushes, laying eight or nine ashy-green eggs: it feeds in the night, concealing itself among the reeds and rushes during the day. It flies with great rapidity, and utters a note not unlike that of the Mallard, but louder.

DUSKY DUCK.

(Anas obscura)

AN. *fusca, collos striis longitudinalibus obscuris, speculo alarum cæruleo nigro marginato, rectricibus albo marginatis.*

Brown Duck with obscure longitudinal stripes on the neck, the speculum of the wings blue, edged with black, the tail-feathers edged with white.

Anas obscura. *Gmel. Syst. Nat.* 1. 541. *Lath. Ind. Orn.* 2. 871.
Dusky Duck. *Lath. Gen. Syn.* 6. 545. *Wils. Amer. Orn.* v. viii. *p.* 141. *pl.* lxxii. *f.* 5.

LENGTH two feet: beak long, narrow, dusky, and tinged with blue: the crown of the head dusky: the neck pale brown, streaked downwards with dusky lines: the back and wing-coverts deep brown: the primaries dusky: speculum of a fine blue, bounded with a black bar: the breast and belly deep brown, the feathers edged with dirty yellow: the tail wedge-shaped, dusky, with white edges: the legs dusky or yellowish. The female has more brown on her plumage; in other respects she resembles the male.

This species inhabits North America, occurring in plenty from Florida to New England: its chief residence is on the coast, though it makes considerable excursions up the larger rivers: they are partially migratory: numbers of them remain on the coast of New Jersey during the summer, and breed in sequestered places in the marshes, or on the sea islands of the beach: they lay eight or ten eggs, very similar to those of the Tame Duck. Their principal food consists of minute shells: they roost at night in the shallow ponds, in the middle of the salt marshes. They are very shy during the day: in calm weather they fly high, beyond gunshot; but when the wind blows fresh, their flight is low, and they are easily shot, provided the gunner keeps himself concealed. Their voice is similar to that of the Wild Duck, and their flesh is much esteemed, although greatly inferior to that of the domestic kind.

BROWN DUCK.

(Anas fuscescens.)

AN. *fuscescens, capite colloque dilutiore, alis cinereis, speculo cæruleo margine albo, caudâ obscurâ.*

Brownish Duck with the head and neck paler, the wings ash-coloured, the speculum blue with a white margin, the tail obscure.

Anas fuscescens. *Gmel. Syst. Nat.* 1. 534. *Lath. Ind. Orn.* 2. 849.

Brown Duck. *Penn. Brit. Zool.* 2. 499. *Lath. Gen. Syn.* 6. 486.

INHABITS Newfoundland: length sixteen inches: beak large, stout at its base; bluish, with its tip black: the nostrils are placed near the end: the head and neck are very pale brown: the lower part of the last, and the breast the same: the feathers edged with ferruginous: the wings ashy-grey: the speculum blue, tipped with white: the tail and legs dusky.

GULAUND DUCK.

(Anas borealis.)

AN. *capite viridi-nitente, pectore abdomineque albis.*

Duck with the head of a shining green, the breast and abdomen white.

Anas borealis. *Gmel. Syst. Nat.* 1. 512. *Lath. Ind. Orn.* 2. 843.

Gulaund Duck. *Penn. Arct. Zool.* 2. 572. *Lath. Gen. Syn.* 6. 465.

Described in Arctic Zoology; and said to be in size between a Goose and a Duck: with a narrow beak: bright green head; and white breast and belly. Inhabits the morasses of Iceland: lays from seven to nine eggs, and is a scarce species. The Icelanders call it *Gulaund*.

SOLITARY DUCK.

(Anas Monacha.)

An. *albo nigroque varia, rostro flavescente apice nigro, speculo alarum viridi-violaceo.*

Duck varied with white and black, the beak yellowish, its tip black, the speculum of the wings green-violet.

Anas Monacha. *Gmel. Syst. Nat.* 1. 516. *Lath. Ind. Orn.* 2. 847.

Solitary Duck. *Lath. Syn. Sup.* ii. 350.

Larger than the Wild Duck: the beak is yellowish, with its tip black: the lores grey: the plumage is varied with black and white: the head and upper part of the breast spotted with black: the primary quills are white, with their tips variegated with brown: the speculum is greenish-violet: the tail is pointed, and white; each feather with a brown spot at the tip.

DAMIETTA DUCK.

(Anas Damiatica.)

An. *alba, capite collo superiore humeris caudæque apice albis, nuchæ lunulâ ferrugineâ, remigibus virescente-atris.*

White Duck, with the head, neck above, shoulders, and tip of the tail white, the nape with a rust-coloured lunule, the quills dark-greenish.

Anas Damiatica. *Gmel. Syst. Nat.* 1. 535. *Lath. Ind. Orn.* 2. 850.

Damietta Duck. *Lath. Gen. Syn.* 6. 487.

Rather larger than the Wild Duck: the head, half the neck, the shoulders, and tip of the tail black: the rest of the neck before, the breast, back, belly, sides, and tail white: at the lower part of the neck behind, a ferruginous crescent: the bend of the wing of the same colour: the quills greenish-black: the hind claw very blunt. Inhabits the shores of Egypt, chiefly in the Bay of Damietta.

SUPERCILIOUS DUCK.

(Anas superciliosa.)

An. *cinereo-fusca, fasciâ suprà infràque oculos gulâ juguloque albis, speculo alarum viridi-cærulescente nigro marginato.*

Ashy-brown Duck with a band above and beneath the eyes, the throat, and jugulum white, the speculum of the wings greenish-blue, edged with black.

Anas superciliosa. *Gmel. Syst. Nat.* 1. 537. *Lath. Ind. Orn.* 2. 852.

Supercilious Duck. *Lath. Gen. Syn.* 6. 497.

About as large as the Wild Duck: the length is twenty-one inches: its beak is two inches and a half long, of a lead-colour, with its tip black: the prevailing colour of its plumage is ashy-brown, with the edges of the feathers paler: on the eye is a white streak, and beneath it is another broader one: the chin and fore part of the neck dusky white: the speculum of the wings bluish-green, surrounded by a black line: legs dusky cinereous. Inhabits New Zealand: called there *He-turrera.*

DOMINICAN DUCK.

(Anas Dominicana.)

An. *griseo-cinerea, facie gulâque albis, fasciâ oculari, occipite, collo, pectoreque nigris.*

Grey-ashy Duck with the face and throat white, a stripe through the eyes, the occiput, neck, and breast black.

Anas Dominicana. *Gmel. Syst. Nat.* 1. 536. *Lath. Ind. Orn.* 2. 659.

Canard Dominicain du Cap de Bonne Esperance. *Sonner. Voy. Ind.* 2. 22.

Dominican Duck. *Lath. Gen. Syn.* 6. 525.

Size of the Wild Duck: beak black: the face and throat are white: from the beak, passing through the eye, is a black streak, ending in an angle behind:

the hind part of the head, the neck, and the breast, black: the back and lesser wing-coverts are of a deep ashy-grey, barred with two bands of very pale grey: the belly and vent are pale grey: the legs are black. Inhabits the Cape of Good Hope.

KEKUSKA DUCK.

(Anas Kekuschka.)

An. *ochracea subtus nivea, dorso cinereo, uropygio caudâque nigerrimis.*

Ochraceous Duck beneath snowy, with the back ash-coloured, the rump and tail very black.

Anas Kekuschka. *Gmel. Syst. Nat.* 1. 531. *Lath. Ind. Orn.* 2. 877.

Kekuschka Duck. *Lath. Syn. Sup.* ii. 356.

Upwards of nineteen inches in length: the prevailing colour of the plumage is of a yellow ochre hue, with the under parts white: the back is cinereous: the rump and tail deep black: the quills, from the fifteenth to the nineteenth, white at the tips. Inhabits the neighbourhood of the Caspian Sea.

SIRSÆIR DUCK.

(Anas Sirsæir.)

An. *rostro subtus flavo, speculo alarum oblique dimidiato supra sericeo-viridi subtus nigro, antice posticeque albo.*

Duck with the beak beneath yellow, the speculum of the wing obliquely divided, above silky green, beneath black, in front and behind white.

Anas Sirsæir. *Gmel. Syst. Nat.* 1. 524. *Lath. Ind. Orn.* 2. 877.
Sirsæir Duck. *Lath. Syn. Sup.* ii. 357.

Beak lead-colour, yellow beneath: the chin white: the crown of the head brown: back the same, with the edges of the feathers whitish: belly whitish: speculum of the wings divided obliquely, above silky green, beneath black; before and behind white: legs grey. Inhabits Arabia.

ARABIC DUCK.

(Anas Arabica.)

An. *griseo maculata, subtus uropygioque albidâ maculis cinereis, alarum speculo nigricante anterius et posterius albo.*

Grey-spotted Duck beneath and rump whitish, with ash-coloured spots, the speculum of the wings dusky anteriorly and white behind.

Anas Arabica. *Gmel. Syst. Nat.* 1. 542. *Lath. Ind. Orn.* 2. 877.
Arabic Duck. *Lath. Syn. Sup.* ii. 357.

Beak yellow; black in the middle: the body is spotted with grey: the under parts and rump whitish, spotted with ash-colour: the speculum dusky, with a white band before and behind: the legs cinereous-yellow. Inhabits Arabia.

ALEXANDRINE DUCK.

(Anas Alexandrina.)

An. *rostro crissoque nigris, collo cinereo semicirculis nigris, abdomine albo, pedibus cinereo flavis.*

Duck with the beak and vent black, the neck ash-coloured, with black semicircles, the abdomen white, the legs ashy-yellow.

Anas Alexandrina. *Gmel. Syst. Nat.* 1. 542. *Lath. Ind. Orn.* 2. 877.

Alexandrine Duck. *Lath. Syn. Sup.* ii. 357.

Anas Sau Sarai. *Forsk. Faun. Arab. p.* 3. 8.

Inhabits Alexandria: the beak and vent are black: the neck ash-colour, marked with black crescents: the belly white: legs yellow ash-colour.

GATTAIR DUCK.

(Anas Gattair.)

An. *fusca, alis nigris subtus albis margine fuscis, remigibus quarto ad vigesimo medio albis.*

Brown Duck with the wings black, beneath white with a brown margin, the fourth to the twentieth quill with the middle white.

Anas Gattair. *Gmel. Syst. Nat.* 1. 542. *Lath. Ind. Orn.* 2. 877.

Gattair Duck. *Lath. Syn. Sup.* ii. 359.

Inhabits Alexandria. Beak brown: the general colour of the plumage the same: the wings black; beneath white, edged with brown: the quills, from the fourth to the twentieth, white in the middle: belly and tail-coverts white: legs bluish-ash colour.

HYNCHASPIS. SHOVELER.

Generic Character.

Rostrum longum, basi inerme, semicylindricum, apice dilato subspathiforme, ungue incurvo, parvo; mandibulæ lateribus laminato-pectinatis.	*Beak* long, its base unarmed, semicylindric, the tip dilated, somewhat spoon-shaped, with a small incurved nail; the sides of the mandibles with pectinated lamellæ.
Nares mediales, ovales, basales.	*Nostrils* medial, oval, basal.
Cauda brevis, simplex; rectricibus quatuordecim plerumque instructis.	*Tail* short, simple, furnished mostly with fourteen feathers.

RHYNCHASPIS. Leach. MSS.
ANAS. Linn., Gmel., Lath., &c.

THE singular form of the beak in this genus sufficiently characterizes it from the rest of the group: this part is larger than in the Ducks, and, like them, has the base free and unincumbered with any tuberculated appendages: at its origin the upper mandible is semicylindric, it then becomes depressed, and at the tip is greatly expanded on the sides, the tip itself

Griff.

COMMON SHOVELLER.

being furnished with a very small incurved nail. The lamellæ at the edges of the mandibles are very long and fine, resembling ciliæ; and those of the opposite mandibles fit into each other in such a manner that very little food can escape the individual while he is in search thereof.

Some species of this genus have the upper part of the beak, towards the tip, membranaceous, or with the edges of the upper mandible prolonged on each side into a membranaceous appendage.

COMMON SHOVELER.

(Rhynchaspis clypeata.)

RH. *capite colloque supremo viridibus, dorso rectricibusque fuscis, abdomine castaneo, tectricibus alarum minoribus, fasciâque alarum cæruleis.*

Shoveler with the head and superior part of the neck green, the back and quills brown, the abdomen chesnut, the lesser wing-coverts and a fascia on the wing blue.

Anas clypeata. *Linn. Syst. Nat.* 1. 200. *Gmel. Syst. Nat.* 1. 518. *Briss. Orn.* 6. 329. *pl.* 32. *f.* 1. male. *Lath. Ind. Orn.* 2. 856.

Anas platyrhynchos altera. *Raii, Syn.* 143. *A.* male.

Anas platyrhynchos. *Raii, Syn.* 144.

Souchet. *Buff. Hist. Nat. Ois.* 9. 191. *Buff. Pl. Enl.* 971, 972. *Cuv. Reg. Anim.* 1. 536.

Canard souchet. *Temm. man. d'Orn.* 543. *Id.* 2 *Edit.* ii. 842.

Anas rubens. *Gmel. Syst. Nat.* 1. 519. *Lath. Ind. Orn.* 2. 837.

Red-breasted Shoveler. *Penn. Brit. Zool.* 2. 281. *Lath. Gen. Syn.* 6. 512.

Shoveler. *Penn. Brit. Zool.* 2. 280. *Penn. Arct. Zool.* 2. 485. *Alb. Birds,* 2. *pl.* 97, 98. *Catesby, Carol.* 1. *pl.* 96. *Hayes, Brit. Birds, pl.* 27. *Lath. Gen. Syn.* 6. 509. *Lath. Gen. Syn.* ii. 353. *Lath. Linn. Trans.* iv. 109. *pl.* 13. *f.* 4, 5. (trachea). *Lew. Brit. Birds,* 7. *pl.* 252. *Walc. Syn.* 1. *pl.* 67. *Mont. Orn. Dict.* 1. *and Sup.* *Bew. Brit. Birds,* 2. 345. *Wils. Amer. Orn.* viii. *p.* 65. *pl.* lxvii. *f.* 7. male.

Length upwards of eighteen inches: beak broad and spatulaform, black, but yellowish beneath: irides yellow: the head and neck deep glossy green: breast pure white: the belly and sides of a chesnut red: the back of a blackish-brown: the wing-coverts clear blue: the scapulars are white, marked with dots and streaks of blackish: the speculum of the wing is deep green: the legs are reddish-orange. The female has the head of a clear red, marked with small black streaks: the feathers on the upper parts are blackish-brown, edged with whitish-red: the under parts are reddish-white, marked with large brown spots: the lesser wing-coverts are dull blue: the speculum is blackish-green: the beak is blackish-brown, with its edges and under parts brown: the irides are bright yellow. The young male in the autumn, and the old during moulting, have some feathers proper to the dress of the males in winter, and others proper to the female or the young male before moulting: these feathers are indistinctly mixed.

The trachea of the male is very slightly enlarged towards the inferior larynx, and has a small osseous protuberance, which is rather dilated below, on its left side; the bronchiæ are very long.

Inhabits various countries of the north of Europe

and of America, frequenting the marshes, lakes, and rivers, and occasionally visiting the sea-coasts; in which situation it is perpetually searching for small worms and the larvæ of insects, sifting, with great address, the watery mud through the long and finely set teeth of its curious beak, which is admirably constructed for the purpose; being large, and capable of retaining very minute worms, seeds, or insects, which constitute the principal food of the bird. The female is said to make her nest on the ground, with withered grass, in the most inaccessible part of the marsh, and to lay ten or twelve rust-coloured eggs: the young, as soon as hatched, are conducted to the water by the parent birds: at first they are very shapeless and ugly, as the beak is then as broad as the body, and is quite out of proportion to the size of the bird: their plumage does not acquire its full colours until after the second moult.

This beautiful species is sometimes met with in England, but by no means common: they do not, however, breed in this country, so far as is yet ascertained; but are said to be not unfrequent in France, where they arrive in February, and disperse and breed in the marshes. They are of so wild, shy, and solitary a disposition, that all attempts hitherto made to domesticate them have failed.

MEXICAN SHOVELER.

(Rhynchaspis Mexicana.)

Rh. *supra nigro fulvo alboque varia subtus fulva, tectricibus alarum minoribus albis, maculâ alarum viridi-aureâ.*

Shoveler varied above with black, fulvous, and white, beneath fulvous, with the lesser wing-coverts white, and a golden-green spot on the wing.

Anas Mexicana. *Lath. Ind. Orn.* 2. 837.

Anas clypeata Mexicana. *Briss. Orn.* 6. 337. *Gmel. Syst. Nat.* 1. 519.

Yacapathahoac. *Raii, Syn.* 176.

Mexican Shoveler. *Lath. Gen. Syn.* 6. 511.

This species inhabits Mexico: it is less than the Wild Duck: its beak is of a brownish-red: the head, neck, and upper parts of the plumage are barred alternately with fulvous, black, and white: the lesser wing-coverts are white; the greater ones farthest from the body brown; those nearest the body of a beautiful green-gold, forming a spot or speculum of that colour on the wing: quills brown: the belly, thighs, and under tail-coverts fulvous: the tail similar to the upper parts of the plumage: the legs pale red.

JAMAICA SHOVELER.

(Rhynchaspis Jamaicensis.)

Rh. *fusco croceo ferrugineoque varia, dorso alis, caudâque fuscis, capite superiore nigro, subtus cum gulâ albo maculis nigris.*

Shoveler varied with brown, saffron, and rust-colour, with the back, wings, and tail brown, the head above black, beneath, with the throat, white with black spots.

Anas Jamaicensis. *Gmel. Syst. Nat.* 1. 519. *Lath. Ind. Orn.* 2. 857.

Jamaica Shoveler. *Lath. Gen. Syn.* 6. 513.

Described by Latham as below, from a specimen in his own possession. " Size of the Buffel-headed Duck (*Clangula albeola*): length sixteen inches: beak an inch and three quarters; in shape very broad, and turns up a little towards the end: general colour of the upper mandible blue; but the place of the nostrils, sides, and all the under mandibles, are orange: the eyes placed high up in the head: irides brown: top of the head, taking in the eyes, black: sides beneath, chin, and throat white, mixed with blackish spots: the upper part of the neck is brown; the lower part all round, breast, and belly, barred dusky and deep ferruginous, inclining to saffron colour: the lower part of the belly, vent, and rump, barred dusky and dirty rufous-white: under tail-coverts dirty white: back and scapulars brown, a little marbled with minute yellowish dots: wings and tail plain dusky brown: the last cuneiform in shape, and rather long: legs orange."

Dr. Latham received this bird from Jamaica, where it first appears in October or November, and stays till March, when it retires north.

RUDDY SHOVELER.

(Rhynchaspis rubida.)

Rh. *genis mentoque albis, vertice nigro, corpore suprà spadiceo, colli parte inferiori pectoreque nigricante-olivaceis, lunulis fuscis, abdomine cano.*

Shoveler with the cheeks and chin white, the crown black, the body above spadiceous, the lower part of the neck and the breast dusky-olive, with brown lunules, the abdomen hoary.

Ruddy Duck. (Anas rubida.) *Wils. Amer. Orn. v.* viii. *p.* 128. *pl.* 71. *f.* 5. male; *f.* 6. female.

This species, which greatly resembles the preceding, is described by Wilson, from two specimens, one of each sex, which were shot on the banks of the river Delaware in the United States of America, as follows: "The Ruddy Duck is fifteen inches and a half in length, twenty-two inches in extent: the beak is broad at the tip, the under mandible much narrower, and both of a rich light blue: nostrils small, placed in the middle of the beak: cheeks and chin white: front, crown, and back part of the neck down nearly to the back, black: rest of the neck, whole back, scapulars, flanks, and tail-coverts deep reddish-brown, the colour of bright mahogany: wings plain pale drab, darkest at the points: tail black, greatly

tapering, containing eightcen narrow-pointed feathers: the plumage of the breast and upper part of the neck is of a remarkable kind, being dusky olive at bottom, ending in hard bristly points of a silvery grey, very much resembling the hair of some kinds of seal-skins; all these are thickly marked with transverse curving lines of deep brown: belly and vent silver grey, thickly crossed with dusky olive: under tail-coverts white: legs and feet ash-coloured.

PIED DUCK.

(Rhynchaspis Labradora.)

RH. *dorso alis abdomineque fuscis, capite collo scapularibus remigibusque secundariis albis, torque fasciâque pectoris nigris.*

Shoveler with the back, wings, and abdomen brown; the head, neck, scapulars, and secondary quills white; a collar and band on the breast black.

Anas Labradora. *Gmel. Syst. Nat.* 1. 537. *Lath. Ind. Orn.* 2. 859.

Pied Duck. *Penn. Arct. Zool.* 2. 488. *pl. in front.* *Lath. Gen. Syn.* 6. 497. *Wils. Amer. Orn.* viii. *p.* 91. *pl.* lxix. *f.* 6.

LENGTH nineteen inches: the base of the beak, and round the nostrils, orange: the under mandible dusky: the head and neck are reddish-white; the feathers of the crown rising in a narrow ridge, along the top of which runs a narrow stripe of black to the nape: round the middle of the neck a black collar,

which passes down the middle, at the back part of the neck, quite to the back: the scapulars are white; some of the inner ones edged with black, and curve downwards over the wings: back and tail brown: the secondaries are white; the greater quills are dusky: on the breast is a black band: the belly is pale brown: the legs yellow: membranes brown. The female is similar to the male: the plumage on the upper parts of the body mottled with dirty brown: the tips of the secondaries white, forming a spot of that colour on the wing: the under parts of the body dirty white: the legs black. According to Wilson, the windpipe or trachea of the male measures ten inches in length, and has four enlargements, viz. one immediately below the mouth, and another at the interval of an inch; it then bends largely down to the breast-bone, to which it adheres by two strong muscles, and has at that place a third expansion. It then becomes flattened, and before it separates into the lungs, has a fourth enlargement much greater than any of the former, which is bony and round, puffing out from the left side. The sides of the beak are clothed with a loose membranous skin.

Inhabits the coast of Labrador, and other parts of North America, but in no great abundance.

NEW HOLLAND SHOVELER.

(Rhynchaspis Rhynchotis.)

Rh. *tectricibus alarum cæruleis, corpore griseo, crisso nigro, pedibus pallidis.*

Shoveler with the wing-coverts blue, the body grey, the vent black, the legs pale.

Anas Rhynchotis. *Lath. Ind. Orn. App.* lxx.

New Holland Shoveler. *Lath. Gen. Syn. Sup.* ii. 359.

The size of the Common Shoveler: about eighteen or nineteen inches in length: the general colour of the plumage resembles that of the Blue-winged Teal, but it is in general darker, and is destitute of the white crescent observed behind the eye of the male of that bird: the vent is black, with several spots of that colour contiguous thereto: the legs pale flesh-colour. The female differs in not having the vent black. Inhabits New Holland.

SOFT-BILLED SHOVELER.

(Rhynchaspis malacorhynchos.)

Rh. *cæruleo-cinerea, rostri apice flexili membranaceo, vertice viridi-cinereo, alarum maculâ transversâ albâ.*

Ashy-blue Shoveler with the tip of the beak flexible and membranaceous, the crown ashy-green, and a transverse white spot on the wing.

Anas malacorhynchos. *Gmel. Syst. Nat.* 1. 526. *Lath. Ind. Orn.* 2. 862.

Soft-billed Duck. *Lath. Gen. Syn.* 6. 522.

Length eighteen inches: beak an inch and a quarter long, of a pale ash-colour; the end of it soft, membranaceous, and black: the top of the head greenish ash-colour: the prevailing colour of the plumage is a bluish lead-colour: across the wing is a white band: the breast is varied with ferruginous: the legs are dusky lead-colour.

Inhabits New Zealand: the singular structure of its beak is a remarkable peculiarity of this bird, the end being very flexible and soft.

FASCIATED SHOVELER.

(Rhynchaspis membranacea.)

Rh. *fusco-ferruginea subtus alba transversim lineata, superciliis ferrugineis, rostro apice membranaceo.*

Rusty-brown Shoveler beneath white striped transversely, with the eyebrows rust-coloured, and the tip of the beak membranaceous.

Anas membranacea. *Lath. Ind. Orn. App.* lxix.
Anas fasciata. *Shaw, Nat. Misc.* 17. *pl.* 697?
New Holland Duck. *Lath. Syn. Sup.* ii. 359.

Length about twenty inches: beak large, the tip soft and membranous, black: irides blue: the upper part of the head, a patch round the eye, and the back part of the neck, dusky: above and behind the eye a rust-coloured streak: back and wings rusty-brown: some of the inner feathers of the latter have very pale tips, and also some of the feathers on the lower

part of the rump and across the tail: the under parts from the nostrils, sides, and part of the neck, and the body beneath, dirty-white, transversely mottled with grey: towards the vent, and sides under the wings, nearly black. Called Wrongi, in New South Wales, of which country it is a native.

DAFILA. PINTAIL.

Generic Character.

Rostrum mediocre, basi inerme, subcylindricum, lineare, apice ungue parvo ornato: mandibulæ lateribus laminato-dentatis.

Nares basales, sub-ovales.

Cauda elongata, acuta, rectricibus sedecim instructis.

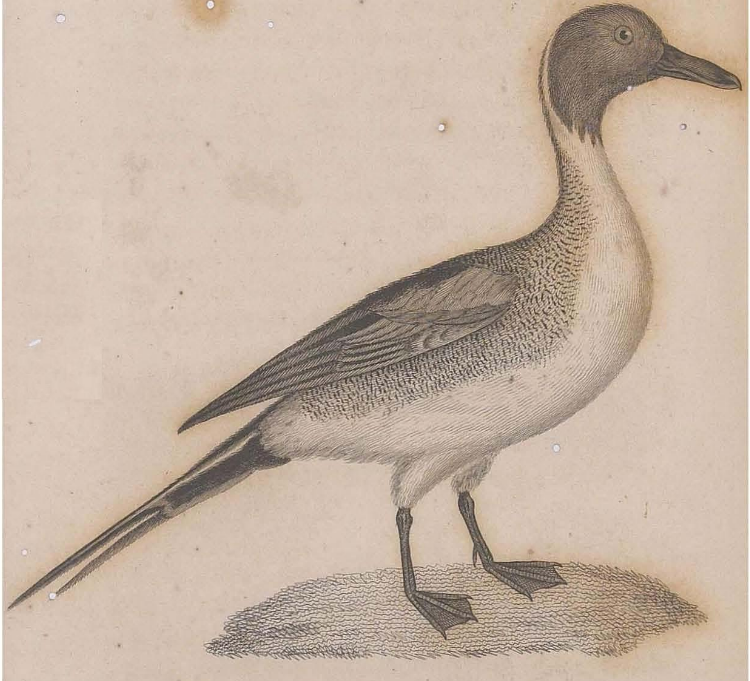
Beak medial, its base unarmed, subcylindric, linear, its tip furnished with a very small hook: the mandibles with their edges laminato-dentated.

Nostrils basal, sub-oval.

Tail elongated, acute, furnished with sixteen feathers.

DAFILA. Leach in Brit. Mus. Collection.

THE Pintail is readily distinguished from the other genera of this stirps by the superior length of its tail, the two middle feathers of which are greatly elongated, particularly in the male: its beak is narrower than in the Shoveler, and longer than that of the Wigeons and Teals. But one species is known, belonging to this genus, whose manners, so far as known, are detailed in the following pages.



COMMON PINTAIL.

COMMON PINTAIL.

(Dafila caudacuta.)

Da. *occipite utrinque lineâ albâ, dorso cinereo undulato, caudâ suprà fuscâ subtus nigrâ.*

Pintail with a white line on each side of the occiput, the back waved with ash-colour, the tail above brown, beneath black.

Anas acuta. *Linn. Syst. Nat.* 1. 202. *Gmel. Syst. Nat.* 1. 528. *Lath. Ind. Orn.* 2. 864.

Anas caudacuta. *Raii, Syn.* 147. *A.*

Anas longicauda. *Briss. Orn.* 6. 369. *pl.* 34. *f.* 1, 2.

Canard à longue queue, ou pilet. *Buff. Hist. Nat. Ois.* 9. 199. *pl.* 13. *Buff. Pl. Enl.* 954. *Cuv. Reg. Anim.* 1. 537. *Temm. man. d'Orn.* 540. *Id.* 2 *Edit.* ii. 838.

Sea Pheasant, or Cracker. *Alb. Birds,* 2. *pl.* 94, 95.

Pintail. *Penn. Brit. Zool.* 2. 282. *Penn. Arct. Zool.* 2. 500. *Lath. Gen. Syn.* 6. 526. *Lath. Syn. Sup.* ii. 354. *Lath. Linn. Trans.* iv. 110. *pl.* 13. *f.* 6. (trachea.) *Walc. Syn.* 1. *pl.* 72. *Lewin. Brit. Birds,* 7. *pl.* 261. *Mont. Orn. Dict.* 2. *and Sup. Bew. Brit. Birds,* 2. 360. *Wils. Amer. Orn.* viii. 72. *pl.* lxviii. *f.* 3. male.

About two feet in length: the beak blackish-blue: the irides clear brown: the top of the head is varied with brown and blackish: the cheeks, throat, and upper part of the neck brown, shaded with violet and purple: on the nape is a black band, which is bordered with two white bands: the fore part of the neck and the under part of the body are pure white: the back and sides are striped with black and ash-coloured zigzags: on the scapulars are long black dashes: the speculum of the wing is purple-green, bordered above by a red band, and beneath by a

white one: the two middle tail-feathers are greatly elongated, and are blackish-green: the legs are reddish-ash or blackish. The female is small, and has the head and the neck of a clear reddish, varied with small black dots: all the upper parts are blackish-brown, irregularly marked with reddish-yellow lunules: the under parts are reddish-yellow spotted with clear brown: the speculum is reddish-brown or yellowish, edged above by a yellowish band, and below by a whitish one: the tail is conical, but its two middle feathers are not elongated: the beak is black: the legs are reddish-black. The young males have the head of a red-brown, spotted with black: the belly is yellowish, and the speculum is olive-green without gloss. The Pintail varies much during the periods of moulting, the male at such times often occurring with the plumage very similar to that of the female. Latham says the trachea of the male ends in a bony arch, to which is attached a nearly round bony bladder, about the size of the end of the thumb, the upper part of which is about even with the bony arch, but the bottom greatly below it: from one of these, one of the divisions arises to pass into the lungs, and from the other the second.

This beautiful bird inhabits the northern regions of Europe, Asia, and America: it is frequently taken in our decoys in winter, but it does not breed with us. On the northern coasts of Ireland and Scotland it is said to be much more abundant; and also in Holland and France. It makes its nest in the shallow fresh water marshes, among the rushes, the female laying eight or nine blue-green eggs. It is a shy

and cautious species, is very noisy, and vigilant in giving the alarm on the approach of the gunner: when a flock is roused they cluster confusedly together as they mount, contrary to the usage of most Ducks. The flesh is greatly esteemed. Montagu says the Pintail bears confinement well, and will breed in that state; he also remarks that the female has been known to produce a hybrid brood, by pairing with a male Wigeon.

MARECA. WIGEON.

Generic Character.

Rostrum breve, basi inerme, subcylindricum, sublineare, apice ungue parvo instructo; mandibulæ lateribus dentato-subserratis.	*Beak* short, its base unarmed, subcylindric, rather linear, the tip furnished with a small hook; the mandibles with their edges slightly dentato-serrated.
Nares parvæ, basales, ovales.	*Nostrils* small, basal, oval.
Cauda brevis, acuta, rectricibus plerumque quatuordecim ornatis.	*Tail* short, acute, mostly furnished with fourteen feathers.

PENELOPE Antiquorum.

THE Wigeons have the beak rather broader and less elevated at the base than the Teals: it is also shorter than in the last-mentioned: in other respects the two genera are similar, but the individuals comprised in the present are usually much larger than the Teals, which are amongst the smallest of the Anatidæ. Wigeons have a peculiar whistling note, unlike that of any other Duck. The name Penelope having been used, by Linné, for another genus, I have adopted the appellation given to some of the species by the illustrious Ray.

Griffith

COMMON WIGEON.

COMMON WIGEON.

(Mareca fistularis.)

MA. *capite brunneo, fronte albâ, dorso cinereo undulato, crisso nigro.*

Wigeon with the head brown, the forehead white, the back waved with ash-colour, the vent black.

Anas Penelope. *Linn. Syst. Nat.* 1. 202. *Gmel. Syst. Nat.* 1. 527. *Raii, Syn.* 146. *A. Lath. Ind. Orn.* 2. 860.

Anas fistularis. *Briss. Orn.* 6. 391. *pl.* 35. *f.* 2.

Canard Siffleur. *Buff. Hist. Nat. Ois.* 9. 169. *pl.* 10, 11. *Buff. Pl. Enl.* 825. *Temm. man. d'Orn.* 542. *Id.* 2 *Edit.* ii. 840.

Le Siffleur. *Cuv. Reg. Anim.* 1. 538.

Wigeon, Whewer, Whim. *Penn. Brit. Zool.* 2. 268. *Penn. Arct. Zool.* 2. 574. *Alb. Birds,* 2. *pl.* 99. *Lath. Gen. Syn.* 6. 518. *Lath. Syn. Sup.* ii. 354. *Lath. Linn. Trans.* iv. iii. *pl.* 13. *f.* 9. (trachea.) *Lew. Brit. Birds,* 7. *pl.* 251. *Walc. Syn.* 1. *pl.* 71. *Mont. Orn. Dict.* 2. *and Sup. Bew. Brit. Birds,* 2. *pl.* 252.

UPWARDS of eighteen inches in length : beak blue, but black at its tip : irides brown : the forehead is yellowish-white : the head and neck are chesnut-red : the face is spotted with black : the throat is black : the breast is of a vinaceous colour : the back and sides are striped with black and white zigzags : the wing-coverts and under parts of the body are white : the speculum of the wing is composed of three bands; the middle one is green, and the outer ones deep black : the scapulars are black, edged with white : the under tail-coverts are black : the legs are ash-coloured. The female is less : the top of the head

and the neck are red, spotted with red: the feathers of the back are blackish-brown, edged with red: the wing-coverts are brown, edged with whitish: the speculum is ashy-white: the breast and sides are red, but all the feathers are tipped with ashy-red: the beak and legs are blackish-ash. The young males resemble the female: the very old males have the yellow on the forehead less extended, as it does not reach so high up towards the crown as in those of a year old: again, it is the old males only who have the wing-coverts of a pure white.

The trachea of the male is nearly similar to that of the Pintail, the labyrinth at the bottom being bony and globular, but differs slightly in its attachment to the side of the windpipe.

Wigeons vary greatly according to the season, as they moult doubly in the course of a few months: in the month of July the male loses the varied colours, and becomes dark ferruginous on the back, scapulars, and sides, and approaches towards the plumage of the female, but less so than the Pintail.

As remarked, when speaking of this last-mentioned bird, the Wigeon has been known to pair with the female Pintail, and produce a hybrid brood. Montagu assures us that Lord Stanley informed him that he procured a female Pintail in London that had (his Lordship was told) bred in confinement: this bird paired with a male Wigeon in his Lordship's menagerie, and produced the first year nine or ten young, all of which were destroyed by the rats. The second year she produced six young, four of which were living in 1813, and above a year old. It was remarkable

that this Pintail was so tenacious of her nest in the advanced state of incubation, as to suffer herself to be lifted to examine the eggs, and continued to effect the hatching of them. The hybrids produced from the above were much plainer than the male Pintail, but more like the female, with a little of the head of the male Wigeon. The male had the posterior parts somewhat like the male Pintail, but the middle tail-feathers much shorter. A fact worthy of remark may be added, which is, that the pond wherein the male Wigeon paired with the female Pintail contained several female Wigeons. The Wigeon will also pair with the Common Duck.

Wigeons frequent the northern parts of Europe, breeding towards the north-eastern countries: the female lays eight or nine dull ashy-green eggs. They are more numerous than any other of this family in the decoys of England, and more are caught in those of Somersetshire and Devonshire than all other wild fowl collectively, as Montagu was assured by an old and experienced decoy-man: they make their appearance in this country on the approach of winter, and return northwards in March. They usually fly in small flocks during the night, and at such times utter their whistling note. They are easily domesticated in places where there is plenty of water; and, according to Montagu, they continue in pairs almost the whole year: they are extremely garrulous and pugnacious; scolding and fighting (especially with birds of their own species) occupy much of their time. They are very much esteemed for the table.

BLACK-TAILED WIGEON.

(Mareca melanura.)

MA. *cinerea, rostro pedibusque testaceis, vertice dorsoque rufis, remigibus rectricibusque nigris.*

Ash-coloured Wigeon with the beak and legs testaceous, the crown and back rufous, the quills and tail-feathers black.

Anas melanura. *Gmel. Syst. Nat.* 1. 516. *Lath. Ind. Orn.* 2. 861.

THIS bird is said to be rather less than the Wild Duck; with the temples ash-coloured, and the rump black, spotted with white; and to have a great affinity to the Common Wigeon.

SPOTTED-BILLED WIGEON.

(Mareca pæcilorhyncha.)

MA. *nigra, genis cum parte juguli cinereis; alarum speculo viridi suprà albo, subtus albo nigroque cincto, remigibus secondariis albidis.*

Black Wigeon with the cheeks and part of the jugulum ash-coloured, the wing speculum green, white above, beneath white, banded with black, the secondary quills whitish.

Anas pæcilorhyncha. *Gmel. Syst. Nat.* 1. 535. *Lath. Ind. Orn.* 2. 850.

Spotted-billed Duck. *Lath. Gen. Syn.* 6. 487.

COMMON in Ceylon in the East Indies: the beak long and black, with a red spot on each side at its

base; its tip white: from the base of the beak, passing through the eyes, is a black streak: the cheeks, chin, and upper part of the neck, ashy-white: the crown, nape, hind part of the neck, back, wing-coverts, primary quills, and tail, black, edged with ash-colour: the secondary quills white: speculum green, the feathers edged with white: the vent black: legs reddish-yellow.

AMERICAN WIGEON.

(Mareca Americana.)

MA. *ferrugineo nigroque undulata, abdomine albido, capite albo nigroque maculato, pone oculos strigâ utrinque ad nucham nigro-virescente, tectricibus alarum medio albis.*

Wigeon waved with rust-colour and black, with the abdomen whitish, the head spotted with black and white, behind the eyes on each side a black-green stripe nearly to the nape, the wing-coverts white in the middle.

Anas Americana. *Gmel. Syst. Nat.* 1. 526. *Lath. Ind. Orn.* 2. 861.

Canard Jensen. *Buff. Hist. Nat. Ois.* 9. 174. *Buff. Pl. Enl.* 955.

American Wigeon. *Penn. Arct. Zool.* 2. 502. *Lath. Gen. Syn.* 6. 520. *Wils. Amer. Orn.* viii. *p.* 86. *pl.* lxix. *f.* 4.

LENGTH twenty-two inches: beak lead-colour, tip black: forehead and crown of the head cream-coloured or sometimes nearly white: the feathers inflated: the hind part of the head and neck speckled with black and white: from the eye backwards to the middle of the neck behind, extends a band of deep changeable

glossy green, gold and purple: that, chin, and sides of the neck before, as far as the green extends, dull yellowish-white, thickly speckled with black: breast and hind part of the neck hoary bay, running in under the wings, where it is crossed with fine waving lines of black: whole belly white: vent black: back and scapulars black, beautifully crossed with undulating lines of bay: lower part of the back more dusky: tail-coverts long, pointed, whitish, waved as the back: tail pointed, brownish-ash, the two middle feathers an inch longer than the rest, and tapering: shoulder of the wing brownish-ash: wing-coverts immediately below white, forming a large spot: primaries brownish-ash; middle secondaries black, glossed with green, forming the speculum: tertials black, edged with white, between which and the speculum several of the secondaries are white. The female has the entire head and neck yellowish-white, thickly speckled with black, very little rufous on the breast: the back is dark brown. The young males are very much like the females during the first season, and do not receive their full plumage until the second year.

Common in North America, extending to the southward, over the West India islands, as far as Cayenne, but most abundant in Carolina, where they frequent the rice plantations: are seldom seen during the daytime, but towards evening they make their appearance, uttering a peculiar whistling noise, or *whew whew*: they feed in company, and are very destructive to the rice plantations, particularly during the rainy season: they lay from six to eight eggs: the female sits about January, and in March the

young are hatched. They appear about Hudson's Bay in May, and depart in the autumn: they perch on trees.

ILATHERA WIGEON.

(Mareca Bahamensis.)

MA. *grisea, rostro plumbeo maculâ laterali fulvâ, maculâ alarum viridi luteâque.*

Grey Wigeon with the beak lead-coloured, with a lateral fulvous spot, and a green and yellow spot on the wings.

Anas Bahamensis. *Linn. Syst. Nat.* 1. 199. *Gmel. Syst. Nat.* 1. 516. *Briss. Orn.* 6. 358. *Lath. Ind. Orn.* 2. 855.

Mareca prima Aldrovandi. *Raii, Syn.* 149.

Le Marec. *Buff. Hist. Nat. Ois.* 9. 256.

Ilathera Duck. *Catesb. Carol.* 1. *pl.* 93. *Penn. Arct. Zool.* 2. 495. *Lath. Gen. Syn.* 6. 507.

THIS species is seventeen inches in length: its beak is lead-colour, with a triangular orange spot on each side near the base: the top of the head is reddish-grey: the upper part of the neck, back, scapulars, and rump, reddish-brown: the cheeks, throat, and fore part of the neck, white: the breast, belly, and thighs are reddish-grey, spotted with black: the lesser wing-coverts are dusky: the greater green, tipped with black: the secondaries a dull yellow; the primaries dusky: the under tail-coverts plain grey: the legs lead-colour.

Inhabits Brazil and the Bahama Islands: it is said to perch on trees.

MARECA WIGEON.

(Mareca Brasiliensis.)

MA. *fusca subtus griseo-aurea, inter rostrum et oculum albo-flavescens, speculo alarum viridi-cæruleo nigro subtus marginato.*
Brown Wigeon beneath golden-grey, yellowish-white between the beak and eye, the speculum of the wing blue, edged beneath with black.
Anas Brasiliensis. *Raii, Syn.* 149. *Gmel. Syst. Nat.* 1. 517. *Briss. Orn.* 6. 360. *Lath. Ind. Orn.* 2. 856.
Le Mareca. *Buff. Hist. Nat. Ois.* 9. 256.
Mareca Duck. *Lath. Gen. Syn.* 6. 508.

NOT very dissimilar to the former species: its beak is black and glossy: the top of the head, upper part of the neck, and the back, are umber colour: on each side of the head, between the beak and eye, is a round yellowish-white spot: the chin is white: the fore part of the neck and under parts of the body are dark grey, glossed with a golden hue: the upper wing-coverts are bright brown, glossed with green; the greater ones brown, with the outer edges blue-green, and tipped with black, forming two bands of these colours: the quills are brown tipped with white: the tail is black and cuneiform: the legs are red.

Inhabits Brazil.

CAPE WIGEON.

(Mareca Capensis.)

Ma. *cinerascens, dorso ex rubescente-fusco, pennis margine flavescentibus, speculo alarum cæruleo-virescente albo marginato.*

Ashy Wigeon with the back of a reddish-brown, the feathers edged with yellowish, the speculum of the wing blue-green edged with white.

Anas Capensis. *Gmel. Syst. Nat.* 1. 527. *Lath. Ind. Orn.* 2. 861.

Cape Wigeon. *Lath. Gen. Syn.* 6. 519.

Described by Latham from the drawings of Sir Joseph Banks. "Size of a Wigeon: length fifteen inches: beak two inches; colour red; round the base black: the head is of a pale bluish-ash colour, marked with minute dusky specks, as in the Wigeon: lower part of the neck and breast bluish-ash colour, the feathers margined with the last: back reddish-brown, edged with cream-colour: quills of a dusky ash: speculum on the wings pale greenish-blue, bounded above and below with white: legs pale red: webs dusky: claws black.

"Inhabits the Cape of Good Hope."

BIMACULATED WIGEON?

(Mareca? glocitans.)

MA? *subcristata fusca nigro undata, capite viridi, maculâ antè poneque oculos ferrugineâ, pectore maculis nigris, speculo alarum viridi albo marginato.*

Slightly crested brown Wigeon? waved with black, with the head green, a rust-coloured spot before and behind the eyes, the breast with black spots, the alar speculum green bordered with white.

Anas glocitans. *Gmel. Syst. Nat.* 1. 526. *Lath. Ind. Orn.* 2. 862.

Bimaculated Duck. *Penn. Brit. Zool.* 2. 287. *pl.* 100. *f.* 2. *Lath. Gen. Syn.* 6. 521. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 355.

THIS rare bird is in length twenty inches: beak deep lead-colour; nail black: irides brown: the crown of the head brown, changeable with green, ending in a streak of brown at the hind head, which is slightly crested: between the beak and eye a round ferruginous spot; another spot of the same, but larger and oblong, behind each ear: throat of a fine deep purple: the rest of the head bright green, continued in streaks down the neck: the breast light ferruginous brown, waved with black: wing-coverts ash-coloured; lower coverts streaked with rust-colour: scapulars cinereous: quills the same, inclining to brown: secondaries fine green, ending in a shade of black edged with white: the two middle tail-feathers black; the others brown edged with white: tail-coverts deep changeble green: belly dusky, finely granulated: legs

small, yellow; webs dusky. The female differs from the male in being of plainer colours, and is nearly destitute of the fine changeable green hues on the head.

The native place of this species is said to be Siberia, in the vicinity of the lake Baikal and the river Lena. Three specimens, however, have been found in England: one described by Pennant as having been taken in a decoy; the other two, which appear to be sexes, were brought to the London market a few winters since from the county of Norfolk, and were fortunately rescued from the jaws of the epicure, and are now in good condition in the beautiful collection of my friend, N. A. Vigors, Esq. who intends to give a detailed account of them to the public.

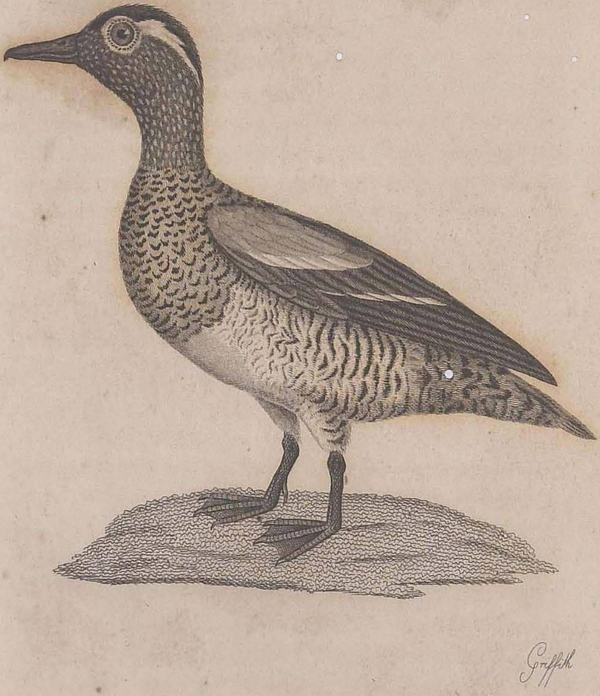
QUERQUEDULA. TEAL.

Generic Character.

Rostrum mediocre, angustum, basi ferè altiùs quam latum, inerme, depressum, sublineare, ungue parvo instructo; mandibulæ lateribus dentatis.	*Beak* mediocral, narrow, its base nearly as high as broad, and unarmed, depressed, sublinear, furnished with a depressed hook; the mandibles dentated at the sides.
Nares ovales, basales.	*Nostrils* oval, basal.
Cauda brevis, acuta, rectricibus plerumque sedecim ornatis.	*Tail* short, acute, mostly adorned with sixteen feathers.

QUERQUEDULA. Ray, Briss.

THE Teals are distinguished by their diminutive size compared with the rest of the Anatidæ: their beak is longer in proportion than that of the Wigeons; it is also much narrower than in those birds, and its base is more elevated, approaching in form to that of some of the smaller species of Bernicle.



GARGANEY TEAL.

GARGANEY TEAL.

(Querquedula circia.)

Qu. *grisea nigro variegata, lineâ albâ suprà oculos, maculâ alarum viridi.*

Grey Teal varied with black, with a white streak above the eyes, and a green spot on the wing.

Anas circia. *Linn. Syst. Nat.* 1. 204. *Gmel. Syst. Nat.* 1. 533. *Raii, Syn.* 148. *Lath. Ind. Orn.* 2. 873.

Querquedula æstiva. *Briss. Orn.* 6. 445.

Sarcelle d'été. *Buff. Hist. Nat. Ois.* 9. 268. *Buff. Pl. Enl.* 946.

Canard Sarcelle d'été. *Temm. man. d'Orn.* 545. *Id.* 2 *Edit.* ii. *p.* 844.

La Sarcelle ordinaire. *Cuv. Reg. Anim.* 1. 539.

Summer Teal. *Penn. Brit. Zool.* 2. 289. *pl.* 101. *Lath. Gen. Syn.* 6. 552. *Alb. Birds,* 2. *pl.* 103, 104.

Young.—Anas Querquedula. *Linn. Syst. Nat.* 1. 203. *Gmel. Syst. Nat.* 1. 531. *Raii, Syn.* 148. *Briss. Orn.* 6. 427. *pl.* 39. *f.* 1, 2. *Lath. Ind. Orn.* 2. 872.

Sarcelle. *Buff. Hist. Nat. Ois.* 9. 260.

Garganey. *Penn. Arct. Zool.* 2. 576. O. *Lath. Gen. Syn.* 6. 550. *Lath. Syn. Sup.* ii. 360. *Lath. Linn. Trans.* iv. 108. *pl.* 13. *f.* 2, 3. (trachea.) *Lew. Brit. Birds, pl.* 259. *Walc. Syn.* 1. *pl.* 75. *Don. Brit. Birds,* 1. *pl.* 21. *Mont. Orn. Dict.* 1. *and Sup.* *Bew. Brit. Birds,* 2. 374.

Length sixteen inches: beak blackish: irides clear brown: the top of the head blackish: a white band passes through the eyes, and is carried towards the nape: the throat is deep black: the head and neck are reddish-brown, sprinkled with small white spots: the base of the neck and the breast are speckled with black bands: on the middle of the scapulars is a white band: the wing-coverts are bluish-ash: the

speculum of the wings is ashy-green, bordered with two white bands: the belly is white, or whitish-yellow: on the sides are several black zigzag lines: the legs are ash-coloured. The female, which is less, has a white band, marked with brown spots, behind and beneath the eyes: the throat is white: the plumage above is blackish-brown edged with clear brown; beneath whitish: the speculum is dull green: the irides brown. The young males, before they moult, resemble the female; and at the commencement of the winter they have the white throat, and many of the feathers, which are common to the old males, mixed with several brown ones: the white band is then spotted with brown: the reddish-brown on the head is less deep: the belly is not shaded with yellowish, but generally varied with brown spots.

The labyrinth of the trachea of the male of this species is entirely bony, like that of the common Wild Duck, of an oval shape, three or four times as large as that of the common Teal, and very different; it is placed perpendicular to the trachea: on one side is a slight indentation for the admission of two muscles; on the opposite side, or that situated next to the breast, it is flattened, and from the upper part of it the bronchiæ, or the divarication of the windpipe, originate.

The Garganey inhabits the more temperate climates of Europe, frequenting the borders of those lakes, rivers, and marshes which are well clothed with rushes: it is abundant in Holland during its winter migration, but is in no great plenty in this country, where it does not make its appearance till

about April: it incubates in the temperate regions, constructing its nest of thick herbs and shrubs in the damp meadows, the female laying about a dozen yellow-green eggs. It feeds upon small slugs, insects, and worms, also upon aquatic plants and their seeds, and occasionally upon small fishes.

Frisch relates the following detail respecting a couple of these birds, that were for upwards of two months in his possession. "I presented to them (he says) different seeds, and they would touch none; but scarcely had I set beside their water-trough a basin filled with millet, than they both ran to it. At every bill-full which they took, each went to the water, and they carried as much of it in a short time as completely to soak the millet; yet the grain was not moistened sufficiently to their mind, and I saw them busied in carrying millet and water to the ground of their pen, which was of clay; and when the bottom was softened and tempered enough, they began to dabble, and made a pretty deep cavity, in which they ate their millet, mixed with earth. I put them in a room, and they carried in the same way, though to little purpose, the millet and water to the deal floor. I led them on the grass, and they seemed to do nothing but dig for seeds, without eating the blades, or even earth-worms. They pursued flies, and snapped at them like Ducks. When I delayed to give them their accustomed food, they called for it with a feeble hoarse cry, *quoak*, repeated every minute. In the evening they lay in the corner; and even during the day, when any person went near them, they hid themselves in the narrowest holes.

They lived there till the approach of winter; but when the severe cold set in, they both died suddenly."

COMMON TEAL.

(Querquedula Crecca.)

Qu. *capite rufo, lineâ albâ suprà infràque oculos, speculo alarum viridi, nigroque, corpore transversim nigricante striato.*

Teal with a red head, a white line above and beneath the eyes, the alar speculum black and green, and the body transversely striped with dusky.

Anas Crecca. *Linn. Syst. Nat.* 1. 204. *Gmel. Syst. Nat.* 1. 532. *Lath. Ind. Orn.* 2. 872.

Querquedula secunda Aldrovandi. *Raii, Syn.* 147. *A.*

Querquedula minor. *Briss. Orn.* 6. 436. *pl.* 40. *f.* 1.

Petite Sarcelle. *Buff. Hist. Nat. Ois.* 9. 265. *pl.* 17, 18. *Buff. Pl. Enl.* 947. *Cuv. Reg. Anim.* 1. 539.

Canard Sarcelle d'hiver. *Temm. man. d'Orn.* 547. *Id.* 2 *Edit.* ii. 846.

Common Teal. *Penn. Brit. Zool.* 2. 290. *Penn. Arct. Zool.* 2. 577. *Alb. Birds,* 2. *pl.* 100. *Hayes, Brit. Birds, pl.* 29. *Lath. Gen. Syn.* 6. 551. *Lath. Syn. Sup.* 276. *Lath. Syn. Sup.* ii. 360. *Lath. Linn. Trans.* iv. 108. *pl.* 13. *f.* 1. (trachea.) *Lew. Brit. Birds,* 7. *pl.* 260. *Walc. Syn.* 1. *pl.* 76. *Mont. Orn. Dict.* 2. *and Sup. Bew. Brit. Birds,* 237. 6.

Green-winged Teal. *Wils. Amer. Orn.* viii. *p.* 101. *pl.* lxx. *f.* 4. male.

Length fifteen inches: beak dusky: irides brown: the top of the head, cheeks, and neck are chesnut-red: the throat is black; a broad green band extends from the eyes to the nape: the inferior part of the neck, the back, scapulars, and sides are alternately striped with zigzag lines of white and black: the

breast is reddish, varied with round spots: the belly is white, or yellowish-white: the wing-coverts are brown: the speculum of the wings is half white, half black, and edged with two white bands: the legs are ash-coloured. The female is less, and has a reddish-white band, spotted with brown, behind and beneath the eyes: the throat is white: the plumage above is blackish-brown, edged with a broad band of clear brown: the under parts are whitish: the beak is marbled with brown, and is of a yellowish-brown beneath, near its edges. The young males before their moult resemble the females: and at the beginning of winter they have the throat white, sometimes spotted with black: the red and green on the head are indistinct, and sprinkled with small white and reddish spots: many of the feathers are brown, mixed with those that are common to the old males: the upper band which borders the speculum is spotted or shaded with reddish: and the white feathers on the belly are often sprinkled with black.

The labyrinth at the bottom of the trachea of the male is very small, of a bony texture, but very thin, and of a suborbicular shape, about the size of a pea.

This species affects more northern regions than the preceding, and occurs equally in those of Europe and America: it is very abundant in England during its migration; but it does not appear usually to breed here, although its nest is said to be not uncommon in France. The nest is large, and is composed of soft dried grasses, lined with feathers, and generally concealed in a hole among the roots of reeds and bullrushes near the edge of the water, and, according to

some persons, placed in such a manner as to rise or fall with the water. The female lays about a dozen reddish-white eggs, which are indistinctly sprinkled with brown dots; they are about the size of those of a pigeon.

The Teal is the least bird of this family: it frequents ponds, marshes, and the reedy shores of creeks, inlets, and rivers: it flies in small flocks, and feeds at night: its flesh is excellent: its food is similar to that of the last described species.

AMERICAN TEAL.

(Querquedula Carolinensis.)

Qu. *nigro alboque undulata, capite colloque suprà castaneis, fasciâ pone oculos speculoque alari viridibus, humeris lunulâ albâ, infrà oculos lineâ obsoletâ albâ.*

Teal waved with black and white, with the head and neck chesnut above, a streak near the eyes, and the alar speculum green, the shoulder with a white lunule, and an obsolete white line beneath the eyes.

Anas Carolinensis. *Gmel. Syst. Nat.* 1. 533. *Lath. Ind. Orn.* 2. 874.

American Teal. *Penn. Arct. Zool.* 2. 504. *Lath. Gen. Syn.* 6. 554.

The American Teal has the head and the upper part of the neck of a fine deep bay colour, with a changeable broad green bar from each eye to the occiput: beneath the eye an obscure whitish line: the fore part of the neck and the breast are spotted

with black: over each shoulder is a lunated white bar: the back is undulated with black and white: the rump is inclining to brown: the wing-coverts are brown: the speculum green: legs dusky. The female is reddish-ashy-brown, spotted with black: the wings are similar to those of the male.

Found in North America, from Hudson's Bay to Carolina: it retires south in the autumn: it lays from five to seven eggs, and affects woods in the vicinity of water. This is probably the same as the preceding.

BLUE-WINGED TEAL.

(Querquedula discors.)

Qu. *tectricibus alarum cæruleis, remigibus secundariis extus viridibus, fasciâ frontali albâ* (mas.): *aut tectricibus alarum cæruleis, corpore griseo-fusco subtus griseo, speculo alarum viridi, fasciâ superiore albâ* (femina.)

Teal with the wing-coverts blue, the secondary quills outwardly green, and a white frontal fascia (*male*): or with the wing-coverts blue, with the body grey-brown, beneath grey, the wing-speculum grey, with a band of white above (*female.*)

Anas discors. *Linn. Syst. Nat.* 1. 205. *Gmel. Syst. Nat.* 1. 535. *Lath. Ind. Orn.* 2. 854.

Querquedula Americana. *Briss. Orn.* 6. 452.

Sarcelle soucrourou. *Buff. Hist. Nat. Ois.* 9. 279. *Buff. Pl. Enl.* 966.

White-faced Duck. *Catesby, Carol.* 1. *pl.* 100. *Penn. Arct. Zool.* 2. 503. *Lath. Gen. Syn.* 6. 502, 503.

Female.—Querquedula Virginiana. *Briss. Orn.* 6. 455.

Sarcelle soucrourette. *Buff. Hist. Nat. Ois.* 9. 280. *Buff. Pl. Enl.* 403.

Blue-winged Teal. *Catesby, Carol.* 1. *pl.* 99. *Wils. Amer. Orn.* viii. *p.* 74. *pl.* lxviii. *f.* 4.

Length upwards of fifteen inches: beak black; its base surrounded by black: crown of the head also black: a white stripe between the beak and eye: the rest of the head and neck glossy green, changing to violet: the back brown, waved transversely with irregular grey lines: the wing-coverts blue: below them a band of white: speculum green: quills and tail brown: the lower part of the neck before, the breast, and belly pale rufous, marked with dusky spots: legs yellow. The female is rather less: beak as in the male: the head and neck brown, varied with pale grey: the back deeper brown: the feathers edged with yellowish buff-colour: the breast and sides the same, but paler: the belly and vent pale yellowish-brown: the scapulars dusky black: the wing-coverts pale blue: the speculum green, with a narrow bar of white between them: the quills and tail dusky: the legs dusky-yellow.

Abundant in America: they arrive in Carolina in August, feed on the rice, and depart in October: when the rice is exhausted they attack the wild oats, and frequent the ponds and fresh waters. Their flesh is said to be very excellent. They fly rapidly, and when they alight drop down suddenly, after the manner of the Woodcock.

BAIKAL TEAL.

(Querquedula formosa.)

Qu. *fusca vertice nigro albo marginato, gulâ rufescente nigro maculatâ, alarum speculo nigro testaceo marginato, anterius maculâ obliquâ viridi-nitente insignitâ.*

Brown Teal with the crown black, edged with white, the throat reddish, spotted with white, the speculum of the wing black, margined with testaceous, and marked in front with an oblique shining-green spot.

Anas formosa. *Gmel. Syst. Nat.* 1. 523. *Lath. Ind. Orn.* 2. 876.

Baikal Teal. *Lath. Gen. Syn.* 6. 557.

"Size of the Teal: length fifteen inches: the beak is black: crown of the head the same, bordered on each side with white: from the eye to the throat, on each side, is a curved streak of black, bounded on the back part by a pale one, and afterwards by one of green: the nape of the neck and sides undulated: throat pale rufous, dotted with black: the back is brown: bastard wing striped with ferruginous, white and black; the outer edge of it undulated: speculum black, on the fore part obliquely marked with glossy green, and edged with testaceous: vent black, spotted on each side with ferruginous, and crossed with a white band: tail somewhat pointed, brown; the middle feathers whitish: legs of a dull red: claws grey. Inhabits Russia, about the Lake Baikal."—*Latham.*

HINA TEAL.

(Querquedula Hina.)

Qu. *lineâ albâ infrà oculos, regione oculorum viridi.*
Teal with a white line beneath the eyes, and the region of the eyes green.
Anas Hina. *Gmel. Syst. Nat.* 1. 523. *Lath. Ind. Orn.* 2. 876.
Hina Teal. *Lath. Gen. Syn.* 6. 558.

A DOUBTFUL species: thus described by Latham. "The beak is blackish-grey, and soft: the head and chin brown: a white line passes below the eyes: all above the eyes green: the neck and upper part of the back white, spotted with black: lower part of the back and rump ash-colour: upper part of the neck white, spotted with black: breast and belly white, spotted with black backwards: the feathers of the rump edged with white: feet and legs ash-coloured. The female has the head and all about the eyes of a whitish-grey: chin white; above black, and in some parts of a reddish-white: beneath white, spotted with black. Inhabits China, where it is called *Hina-a.*"

MANILLA TEAL.

(Querquedula Manillensis.)

Qu. *fusca, capite anteriore gulâ jugulique parte supremâ albis, abdomine albo lunulis nigris, remigibus rectricibusque schisti colore.*

Brown Teal with the head in front, the throat, and the upper part of the jugulum white, the abdomen white with black lunules, the quills and tail-feathers slate-colour.

Anas Manillensis. *Gmel. Syst. Nat.* 1. 523. *Lath. Ind. Orn.* 2. 875.

Sarcelle de l'Isle de Luçon. *Sonner. Voy. Ind.* 91. *pl.* 54.

Manilla Teal. *Lath. Gen. Syn.* 6. 557.

A SMALL species: beak black: the front and sides of the head and throat white: the neck, breast, and wing-coverts reddish-brown: the back yellowish: the feathers edged with black: the quills and tail slaty-black: the feathers of the belly white, with black edges: the legs blackish. Inhabits Manilla.

MEXICAN TEAL.

(Querquedula Novæ Hispaniæ.)

Qu. *alba nigro maculata, capite fulvo nigricante viridi-cæruleoque vario, tectricibus alarum crissoque cæruleis, maculâ inter rostrum et oculum fasciâque alarum albâ.*

White Teal spotted with black, with the head fulvous, varied with dusky and blue-green, the wing-coverts and vent blue, a spot between the beak and eyes, and a fascia on the wing white.

Anas Novæ Hispaniæ. *Gmel. Syst. Nat.* 1. 525. *Lath. Ind. Orn.* 2. 868.

Querquedula Mexicana. *Briss. Orn.* 6. 458.

Toltecoloctli, Metzcanahachtli. *Raii, Syn.* 175.

Sarcelle du Mexique. *Buff. Hist. Nat. Ois.* 9. 285.

Mexican Duck. *Lath. Gen. Syn.* 6. 539.

SIZE of the Common Teal: the upper mandible blue; the under mandible black: the irides the same, or, according to others, yellow: the head is fulvous, mixed with blackish and glossy greenish-blue: between the beak and eye is a large spot of white: the neck and body white, sprinkled with black dots, especially on the breast: the scapulars and upper tail-coverts the same: under tail-coverts and wing-coverts blue, the last with a white band; the greater coverts, farthest from the body, dusky: the quills black; some of the middle ones outwardly green, with fulvous tips, forming a band of the last colour across the wing; the quills nearest the body are white, dotted with black: the tail dusky black, edged with white: the legs pale red. The female differs in having the head, hind part of the neck, back and scapulars, wing-coverts and rump, black; some of the feathers edged with fulvous, and others with white: the throat, fore part of the neck, breast, and under parts of the body variegated with black and white: the primary quills are black, externally margined with white; the next green on the outer webs, and black within; and those nearest the body black, outwardly banded with white: tail as in the male: legs cinereous.

Native of Mexico, Surinam, and other parts of America.

STIRPS IV.

Rostrum *basi latiùs quam altum, lateribus serrato-dentatis:* pollex *lobo instructus.*

Beak broader than high at its base, its sides serrato-dentate: the *hind toe* furnished with a lobe.

This stirps contains two genera only, which are characterised by the slender and cylindric form of the beak, the sides of which are armed with saw-like denticulations, and not with laminæ, or plates, as in the rest of the Ducks: the hinder toe is furnished with a membrane. They live in lakes and ponds, and swim with great address, dive admirably, and at times submerge their entire body, leaving only the head and part of the neck exposed, and proceed with great rapidity, in which they are assisted by their wings: they fly well, but walk indifferently: their chief subsistence consists of fishes and amphibia, to the former of which they are very destructive: they reside and incubate in the frigid regions, but visit more temperate climates during the severity of the weather in winter: they are usually very wild, and have not hitherto been kept in confinement.

MERGUS. SMEW.

Generic Character.

Rostrum capite brevior, rectum, gracile, subcylindricum; mandibulâ superiore apice valde curvato, unguiculato.	*Beak* shorter than the head, straight, slender, somewhat cylindric; the upper mandible much curved at its tip, and hooked.
Nares laterales, subovales, versus medium rostri positæ.	*Nostrils* lateral, suboval, placed towards the middle of the beak.
Pedes breves, *digitus* externus reliquis longior.	*Legs* short, the *outer toe* longer than the rest.

MERGUS. Ray, Linn., Gmel., Briss., &c.
MERGANSER. Briss.

THE chief distinction between this genus and the following consists in the inferior length of the beak, which in the Smew is considerably shorter than the head; whereas in the Merganser it is as long, or longer than that part. The separation of this genus from the Mergansers will no doubt be considered by the disciples of the Linnean school as an unnecessary innovation; but to me there appears to be sufficient reason for dividing it from the following genus, as pointed out by the inferior size of the beak, and the

Griffith

WHITE SMEW.

smaller serratures with which its edges are furnished, exclusive of the general habit of the only species hitherto discovered, which feeds more exclusively upon crustaceous animals than the Mergansers.

WHITE SMEW.

(Mergus albellus.)

MR. *corpore albo, dorso nigro vel fusco-nigricante, occipite temporibusque viridi-nigris.*

Smew with a white body, the back black, or dusky brown, the occiput and temples green-black.

Mergus albellus. *Linn. Syst. Nat.* 1. 209. *Gmel. Syst. Nat.* 1. 547. *Briss. Orn.* 6. 245. *pl.* 24. *f.* 1. *Lath. Ind. Orn.* 2. 831.

Mergus major cirrhatus. *Raii, Syn.* 135. *A.*

Mergus Rheni. *Raii, Syn.* 135.

Le petit Harle huppé, ou la Piette. *Buff. Hist. Nat. Ois.* 8. 275. *Buff. Pl. Enl.* 449. *Temm. man. d'Orn.* 581. *Id.* 2 *Ed.* ii. 887. *Cuv. Reg. Anim.* 1. 540.

Smew, or White Nun. *Penn. Brit. Zool.* 2. 262. *Lath. Gen. Syn.* 6. 428. *Lath. Syn. Sup.* 271. *Lath. Syn. Sup.* ii. 338. *Lew. Brit. Birds,* 6. *pl.* 234. *Walc. Syn.* 1. *pl.* 82. *Mont. Orn. Dict.* 2. *and Sup. Lath. Linn. Trans.* 4. 234. *pl.* 16. *f.* 3, 4. (trachea.) *Bew. Brit. Birds,* 2. 264. *Wils. Amer. Orn. v.* viii. *p.* 126. *pl.* xci. *f.* 4.

FEMALE, or YOUNG.—Mergus minutus. *Linn. Syst. Nat.* 1. 209. *Lath. Ind. Orn.* 2. 832.

Mergus Asiaticus. *Gmel. Syst. Nat.* 1. 548.

Merganser stellatus. *Briss. Orn.* 6. 252.

Merganser cristatus minor. *Briss. Orn.* 6. 243. *pl.* 24. *f.* 2.

La Piette femalle. *Buff. Pl. Enl.* 450.

Le Harle étoilé. *Buff. Hist. Nat. Ois.* 8. 278.

Lough Diver. *Penn. Brit. Zool.* 2. 560. *Penn. Arct. Zool.* 2. 540. *Bew. Brit. Birds*, 2. 268.
Red-headed Smew. *Penn. Brit. Zool.* 2. 263. *Bew. Brit. Birds*, 2. 266. *Walc. Syn.* 1. *pl.* 83.
Minute Merganser. *Lath. Gen. Syn.* 6. 429. *Lew. Brit. Birds*, 6. *pl.* 235. *Don. Brit. Birds, pl.* 52. *Mont. Orn. Dict.* 2. *and Sup.*

Length about seventeen inches: the beak, legs, and toes ashy-blue: the membranes of the latter black: the irides brown: the old male has a large spot of green-black on each side of the beak, another longitudinal one on the occiput: the crest, which is much tufted, the neck, the scapulars, the lesser wing-coverts, and all the under parts very pure white: the top of the back, two crescents, which are directed towards the sides of the breast, and the edges of the scapulars deep black: the sides and thighs varied with ashy zigzag stripes: the tail ash-coloured. The female is rather less: has the top of the head, the cheeks, and the occiput of a reddish-brown: the throat, upper part of the neck, belly, and abdomen white: the lower part of the neck, the breast, sides, and rump of a bright ash: the upper part of the tail very deep ash: the wings varied with white, ash-coloured, and black. The young during the first year resemble the female: the males at the age of one year are distinguished by some small dusky feathers, which form a large spot on the side near the beak; by several whitish and white feathers which are scattered on the head and nape; by the upper part of the back being varied with black and ash-coloured feathers, and by the indication of the two black lunules on each side of the breast. The young

of both sexes are also discriminated by a large white space on the greater wing-coverts, which in the old are white only at their tips.

The trachea of this bird (according to Latham) is smallest near the upper part, but enlarges as it approaches towards the middle, whence to the bottom it continues nearly of equal dimensions, the texture consisting of completely bony rings, with scarcely any intervening: at the bottom is a bony cavity as in the Merganser, smaller in proportion, and differing in shape, the greater expanse being from side to side, whereas in them it is almost upwards and downwards: on one side is a round hole, covered by a drum-like membrane, and on the opposite an oval smooth hollow bone uniting with it: from the bottom arise the branchial tubes.

The Smew inhabits the arctic regions of the two worlds; and in the autumn and throughout the winter is plentiful in England, France, Germany, Holland, and sometimes as far south as Italy. It frequents our coasts and fresh waters in the winter, but has not been known to breed in this country. It is said to lay from ten to a dozen whitish eggs. It is a very shy species, and readily takes wing when surprised: is equally expert in air as in water, and is with difficulty shot. Its principal food is small crustacea and fish, after which it dives with great ease, and remains for a long period under water.

MERGANSER. MERGANSER.

Generic Character.

Rostrum capite longiùs, rectum, gracile, subcylindricum, basi depressiusculum; mandibulâ superiore apice valde adunco, unguiculato.

Nares in medio rostri sitæ, parvæ, ovatæ.

Pedes breves, *digitus* externus reliquis longior.

Beak as long as the head, straight, slender, somewhat cylindric, its base rather depressed; the upper mandible with its tip much bent, and armed with a nail.

Nostrils placed in the middle of the beak, small, ovate.

Legs short, the *outer toe* larger than the rest.

MERGANSER. Briss.
MERGUS. Ray, Linn., Gmel., Lath., &c.

THE Mergansers have the beak as long as the head, and more slender and deeply serrated in proportion than the Smews: this part has each mandible armed, throughout its length, with a row of small pointed teeth, similar to those of a saw, and pointing backwards: the tip of the upper mandible is hooked. The swelling of the lower larynx of the trachea in the males is very large, and is partly membranaceous. These birds feed chiefly upon fish.

Griffith

COMMON MERGANSER.

COMMON MERGANSER.

(Merganser Raii.)

Me. *speculo alarum albo, absque fasciis transversis, capite nigro, vel spadiceo.*

Merganser with the wing-speculum white, without transverse bands, the head black, or chesnut.

Mergus Merganser. *Linn. Syst. Nat.* 1. 208. *Gmel. Syst. Nat.* 1. 544. *Briss. Orn.* 6. 231. *pl.* 32. *Raii, Syn.* 134. *A. Lath. Ind. Orn.* 2. 828.

Le Harle. *Buff. Hist. Nat. Ois.* 8. 267. *pl.* 23. *Buff. Pl. Enl.* 951. *Cuv. Reg. Anim.* 1. 540.

Grand Harle. *Temm. man. d'Orn.* 575. *Id.* 2 *Edit.* ii. 881.

Goosander, or Merganser. *Penn. Brit. Zool.* 2. 260. *pl.* 92. *f.* 1. *Penn. Arct. Zool.* 2. 465. *Lath. Gen. Syn.* 6. 418. *Lath. Syn. Sup.* ii. 336. *Lew. Brit. Birds,* 6. *pl.* 231. *Walc. Syn.* 1. *pl.* 79. *Don. Brit. Birds,* 3. *pl.* 49. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. *pl.* 254. *Wils. Amer. Orn. v.* viii. *p.* 68. *pl.* lxviii. *f.* 1. *v.* ix. *p.* 131.

Greater Goosander. *Simmonds, Linn. Trans.* iv. 122.

Merganser Raii. *Leach, Brit. Mus. Catal. p.* 36.

Female, or Young.—Mergus Merganser. *Briss. Orn.* 6. 231.

Mergus Castor. *Linn. Syst. Nat.* 1. 209. *Gmel. Syst. Nat.* 1. 545. *β. Lath. Ind. Orn.* 2. 829.

Mergus cirratus longiroster. *Raii, Syn.* 134. *A.*

Merganser cinereus. *Briss. Orn.* 6. 254. *pl.* 25.

Mergus rubricapillus. *Gmel. Syst. Nat.* 1. 545.

Anas rubricapilla. *Brunn. Orn. Boreal.* 93.

Le Harle femelle. *Buff. Hist. Nat. Ois.* 8. 236. *Buff. Pl. Enl.* 953.

Dundiver, or Sparling Fowl. *Penn. Brit. Zool.* 2. 260. *pl.* 92. *f.* 2. *Penn. Arct. Zool.* 2. 465. *Alb. Birds,* 1. *pl.* 87. *Lath. Gen. Syn.* 6. 420, 421. *A. Lath. Syn. Sup.* 270. *Lew. Brit. Birds, pl.* 232. *Walc. Gen. Syn.* 1. *pl.* 80. *Don. Brit. Birds,*

3. *pl.* 65. *Mont. Orn. Dict.* 1. *and Sup.* *Bew. Brit. Birds*, 2. 257.
Goosander. *Wils. Amer. Orn. v.* viii. *p.* 71. *pl.* lxviii. *f.* 2.
Merganser gulo. *Leach, Brit. Mus. Catal. p.* 36.

About thirty inches in length: the male has a large short-tufted crest: the beak of a deep red, but black above near the hook: the irides are reddish-brown, sometimes red: the head and upper part of the neck are black glossed with greenish: the lower part of the neck, the breast, belly, vent, and the wing-coverts farthest removed from the body are of a pure white; shaded, for a short period after moulting, with a beautiful rosy-yellow tinge on the lower parts of the body: the top of the back, and the scapulars nearest the body are deep black: the bend of the wing dusky: the greater coverts edged with black: the back and tail ash-coloured: the legs of a bright vermilion. The female differs considerably: the crest is long and slender: the head and upper part of the neck are reddish-brown: the throat is pure white: the lower part of the neck, the breast, the sides, and the thighs are whitish-ash: the belly and vent are yellowish-white: all the upper parts are deep ash: the speculum of the wing is white: the beak is dirty red: the irides brown: the legs are yellowish-red; the membranes are ashy-red. The young males do not differ from the females: at the age of one year they are distinguished by some dusky spots, which are disposed on the white of the throat: the red on the neck is then terminated by a deeper colour: there are some dusky feathers on the top of the head; and the white plumes of the wing-coverts begin to appear.

The trachea of the male is very long; it is composed, immediately beneath the throat, of cylindric rings: about two inches down it is suddenly enlarged into a broad and depressed expansion, composed of alternate rings; it is then again contracted, and the rings become cylindric; afterwards it is enlarged into a second expansion, but smaller than the first; the tube at a little distance from the inferior larynx becomes very straight and cylindric: the inferior larynx is very large, and of a bony texture; it is dilated in front, on its left side, and behind: on the right side there is a large elevation formed by three bony keels, which are united on the top, and form three flat surfaces, on which a drum-like membrane is stretched; this part of the larynx is separated interiorly from the osseous portion on the left by a membranous partition, which is open and loose below. The branchial tubes are placed at some distance from each other, that of the right being placed immediately opposite to the pendulous membrane which forms the interior partition.

There appears to be much difference of opinion respecting the identity of the Goosander and the Dundiver; many ornithologists insisting that they are absolutely distinct species, while others of equal experience pronounce them to be merely the sexes of one species: both parties support their assertions by a reference to the great field of nature, which is equally open to the man of science and to the humble and untutored peasant. It appears, however, that the great contrariety of opinion upon these points amongst the ornithologists of this country has origin-

ated from the rarity of the birds of this stirps in Britain; connected also with the fact that the young males generally put on the plumage of the adult females; which last consequently accounts for the well known circumstance of finding, apparently, both sexes of the Dundiver in Britain, and but one sex of the Goosander. Temminck and other continental writers are of opinion that there exists but one species among the *three supposed* sexes that are apparent in this; and as both the Dundiver and Goosander are always observed in the same haunts, I have very little doubt of their observations being in accordance with the dictates of nature, and as such I have adopted the synonyma above quoted, with reference to Temminck's arrangement.

This species inhabits the arctic regions of the old and new continents, migrating towards the south upon the approach of winter: during which season it is particularly abundant in Holland and France, but in very severe frosts retiring to the lakes in the more internal parts of the continent. It occurs but sparingly in Great Britain, unless during very hard winters, when they are common on the fresh water pools, rivers, and fens of the East Riding of Yorkshire, and in the fens of Lincolnshire. They remain, according to Pennant, all the year in the Orkneys, and are found during the summer in the Hebrides. They retire to the north to breed, the female making her nest among the loose stones on the borders of rivers, or in a hollow tree: she usually lays from twelve to fourteen whitish eggs, which are of nearly equal diameter at each end. These birds generally feed on

fish, amphibious animals, or marine mollusca, which renders their flesh very unpalatable, and being wherewithal very lean and rancid, is held in very little estimation.

RED-BREASTED MERGANSER.

(Merganser serrata.)

Me. *speculo alarum albo, fasciis duabus nigris transversis in* mare, *vel unâ in* feminâ.

Merganser with the wing-speculum white, with two transverse black bands in the *male*, and one in the *female*.

Mergus serrata. *Linn. Syst. Nat.* 1. 208. *Gmel. Syst. Nat.* 1. 546. *Lath. Ind. Orn.* 2. 829. *Sabine, Frank. Journ. App.* 702.

Mergus serrata leucomelanus. *Gmel. Syst. Nat.* 1. 546. ϑ. *Briss. Orn.* 6. 256.

Mergus cirrhatus fuscus. *Raii, Syn.* 135. *A.*

Mergus cristatus. *Briss. Orn.* 6. 237. *pl.* 23.

Merganser cristatus. *Leach, Brit. Mus. Catal. p.* 36.

Le Harle huppé. *Buff. Hist. Nat. Ois.* 8. 273. *Buff. Pl. Enl.* 207. *Temm. man. d'Orn.* 579. *Id.* 2 *Edit.* ii. 884. *Cuv. Reg. Anim.* 1. 540.

Harle à manteau noire. *Buff. Hist. Nat. Ois.* 8. 277.

Red-breasted Merganser. *Penn. Brit. Zool.* 2. 261. *pl.* 93. *Penn. Arct. Zool.* 2. 466. *Edw. Glean. pl.* 95. *Alb. Birds,* 2. *pl.* 101. *Lath. Gen. Syn.* 6. 423. *Lath. Syn. Sup.* ii. 337. *Lewin. Brit. Birds,* 6. *pl.* 233. *Walc. Syn.* 1. *pl.* 81. *Don. Brit. Birds,* 2. *pl.* 38. *Mont. Orn. Dict.* 2. *and Sup. Lath. Linn. Trans.* iv. 121. *pl.* 16. *f.* 1, 2. (trachea.) *Bew. Brit. Birds,* 2. 261. *Wils. Amer. Orn. v.* viii. *p.* 81. *pl.* lxix. *f.* 2. male.

Young.—Mergus serratus. *Gmel. Syst. Nat.* 1. 546. *α.*

Mergus niger. *Gmel. Syst. Nat.* 1. 546. *β.*

Merganser niger. *Briss. Orn.* 6. 251.
Black Merganser. *Lath. Gen. Syn.* 6. 426. *B.*

LENGTH about two feet: the male has a long and slender crest, which, with the head and upper part of the neck, is black glossed with green: a white collar surrounds the neck: the breast is reddish-brown marked with black spots: at the insertion of the wings are five or six large white spots, which are edged with black: the speculum of the wing is white, striped with two transverse black bands: the top of the back and scapulars are deep black: the belly is white: the thighs and rump are rayed with ashy zigzag lines: the beak and irides are red: the legs orange. The old female has the head, the crest, and the neck of a reddish-brown: the throat white: the fore part of the neck and the breast varied with ash-colour and white: the upper parts and the flanks are deep ash: the speculum of the wing is white, with one ash-coloured band: the lower parts of the body are white: the beak and legs are dull orange: the irides are brown. The young males of the year have the beak bright red, and the irides yellowish: the head of a deep brown: the throat of an ashy-white. At the age of one year they have the upper parts varied with blackish; and the neck and head tinged with reddish.

The trachea of this species in some respects resembles that of the preceding, but it possesses only one dilatation: it is of moderate length; and, with the above exception, the upper part corresponds with that of the last described bird; but below it is different: at about two inches from the lower larynx

the windpipe is very much depressed, and the depression consists of about nineteen or twenty rings, which are very broad on the lower part of the tube, which appears like a piece of chain-work, composed of straight bony keels, having between them a series of drum-like membranes: the large lower larynx is dilated in front and below, and forms two bony protuberances in the hinder part, of which that on the right is largest; both of them are furnished laterally with a drum-like membrane.

This species inhabits the same countries with the preceding, appearing in the south of England in winter, but more frequently in the north, and in Scotland, in some of the lochs of which country they are said to breed: the female lays from eight to thirteen eggs, in a nest placed near the edge of the water: the nest is constructed of dry grass lined with down.

These birds frequent the coasts of America, as well as the interior fresh water lakes of that continent, keeping within the bays and estuaries of rivers: they swim low in the water, and, when wounded in the wing, very dexterously continue to elude the sportsman or his dog, by diving and coming up at a great distance, raising the beak only above water, and dipping down again in the greatest silence. Their food consists of small fry and shell-fish.

HOODED MERGANSER.

(Merganser cucullatus.)

ME. *cristâ globosâ utrinque albâ, corpore supra fusco, subtus albo.*
Merganser with a globose crest, white on each side, the body above brown, beneath white.
Mergus cucullatus. *Linn. Syst. Nat.* 1. 207. *Gmel. Syst. Nat.* 1. 544. *Lath. Ind. Orn.* 2. 830. *Sabine, Frank. Journ. App.* 702.
Merganser Virginianus cristatus. *Briss. Orn.* 6. 258.
Ecatotol altera. *Raii, Syn.* 175.
Le Harle couronné. *Buff. Hist. Nat. Ois.* 8. 280. *Buff. Pl. Enl.* 935, 936.
Wind Bird. *Will. Birds,* 389.
Round-crested Duck. *Cates. Carol.* 1. *pl.* 94. *Edw. Glean. pl.* 360.
Hooded Merganser. *Penn. Arct. Zool.* 2. 467. *Lath. Gen. Syn.* 6. 426. *pl.* 101. *Wils. Amer. Orn.* v. viii. *p.* 79. *pl.* lxix. *f.* 1.

THE Hooded Merganser is eighteen inches in length, and two feet in extent: beak blackish-red, narrow, thickly toothed, and furnished with a projecting nail at the extremity: the head is ornamented with a large circular crest, which the bird has the faculty of elevating or depressing at pleasure: the fore part of this, as far as the eye, is black; from thence to the hind head white, and elegantly tipped with black; it is composed of two separate rows of feathers, radiating from each side of the head, and which may be easily divided by the hand: irides golden: eye very small: neck black, the colour spreading to and over the back: part of the lesser wing-coverts very

pale ash, under which the greater coverts and secondaries form four alternate bars of black and white: tertials long, black, and streaked down the middle with white: the black on the back curves prettily round in two points on the breast, which, with all the lower parts, are pure white: sides under the wings and flanks reddish-brown, elegantly crossed with parallel black lines: tail pointed, consisting of twenty sooty-brown feathers: legs and feet flesh-coloured: claws large and stout. The windpipe has a small labyrinth. The female is rather less: the crest smaller, and of a light rust colour, entirely destitute of white: the upper half of the neck dull drab, with lighter semicircles: the white on the wings as in the male; but the tertials are shorter and less white: the back is brownish-black: the rest of the plumage is similar to that of the male.

This species appears to be peculiar to North America: it is said to arrive at Hudson's Bay about the end of May: it builds on the borders of the lakes; the female laying six white eggs, in a nest composed of grass, lined with feathers plucked from her breast. This species is migratory, and proceeds southwards during the severity of the winter; occurring during that season in several of the United States of America.

IMPERIAL MERGANSER.

(Merganser imperialis.)

ME. *nigro fusco griseoque varius, capite lævi, remigibus primoribus nigris, rostro pedibusque rufescente albis.*

Merganser varied with black, brown, and grey, with the head smooth, the primary quills black, the beak and legs reddish-white.

Mergus imperialis. *Gmel. Syst. Nat.* 1. 547. *Lath. Ind. Orn.* 2. 829.

Imperial Merganser. *Lath. Gen. Syn. Sup.* ii. 337.

THIS bird is described by Latham as being the " size of a Goose: the body variegated with black, brown, and grey: the head without crest: the prime quills black, and without any speculum: beak and legs rufous white: tongue ciliated. Inhabits Sardinia."

BROWN MERGANSER.

(Merganser fuscus.)

ME. *cristatus fuscus subtus albus, gulâ pectoreque nigro maculatis, alis nigris fasciâ albâ.*

Crested brown Merganser beneath white, with the throat and breast spotted with black, the wings black with a white stripe.

Merganser fuscus. *Lath. Ind. Orn.* 2. 832.

Brown Merganser. *Penn. Arct. Zool.* 2. *Sup.* 74. *Lath. Syn. Sup.* ii. 339.

About eighteen inches in length: the head is deep brown: from the orbits of the eyes, extending backwards and ending in a large pendent crest, is a whitish streak; the upper part of the crest is brown, and the under black: the greater and lesser wing-coverts, the scapulars, and tail, are black; as are also the secondaries, but the latter are mottled with white on each web: the belly is white: the vent tawny: the legs dusky yellow.

This species inhabits North America, and arrives at Hudson's Bay in May: it makes its nest with grass, and lines it with feathers: it retires when the rivers become frozen up.

BLUE MERGANSER.

(Merganser cæruleus.)

Me. *cristatus cæruleus, vertice caudâque nigris, gulâ abdomine maculâque alarum albis.*

Crested blue Merganser with the crown and tail black, the throat, abdomen, and spot on the wing white.

Mergus cæruleus. *Lath. Ind. Orn.* 2. 833.

Blue Merganser. *Penn. Arct. Zool.* 2. *Sup.* 74. *Lath. Syn. Sup.* ii. 340.

White-faced Duck. *Lath. Gen. Syn.* 6. 504. *A.*

"Length fourteen inches: beak one inch long, narrow, and black: irides blue: the forehead and crown of the head black and shining: a spot of white on the ears: the back of the neck brown: the sca-

pulars and lesser wing-coverts deep blue; the greater coverts the same, tipped with white: the primaries deep blue: the secondaries the same within, and white without: the throat and belly white: the breast and vent blue: the tail black: the legs blue.

Inhabits North America; appearing in Hudson's Bay in June, and departing in October: it is said to lay ten small white eggs in a hollow stump, or among rotten wood near the water, without attempting to construct any nest: the young, when hatched, are diligently attended by the mother to the water, immediately upon bursting the shell.

FORKED MERGANSER?

(Merganser? furcifer.)

ME? *niger capite lævi, collo crisso abdomine rectricibusque lateralibus albis, fronte genisque dilute fuscis, caudâ furcatâ.*

Black Merganser? with a smooth head, the neck, vent, abdomen, and lateral tail-feathers white, the forehead and cheeks pale brown, the tail forked.

Mergus furcifer. *Gmel. Syst. Nat.* 1. 548. *Lath. Ind. Orn.* 2. 832.

Forked Merganser. *Lath. Gen. Syn. Sup.* ii. 339.

"INHABITS Courland: the beak is black at the tip and the base; but the middle is reddish: the irides pale brown: from the ears, down the sides of the neck, quite to the breast, a black stripe, shaded for half the length with chesnut: hind head and neck

white: breast, back, and rump black, the feathers appearing scaly: belly and vent white: tail forked as in the Swallow: the outer feathers white: wing-coverts shaded not unlike the back: lesser quills like the back, part of them white, making a large spot of that colour between the back and wings."—*Latham.*

STIRPS V.

Rostrum *basi latiùs quam altum, lateribus laminato-dentatis;* tarsi *elongati, compressi;* pollex *lobo instructus.*

Beak broader than high at its base, its sides laminato-dentated; the *tarsi* elongated, compressed; the *hinder toe* furnished with a membrane.

The birds belonging to this stirps are distinguished from those of the third by the lobated appendage to the hinder toe, and from the preceding by the form of the beak, which is not serrated. They are stouter made, and some of the genus approach in stature and affinity to the Geese; others to the Divers: their wings are very short: their legs are placed more backward on the body than in any other Ducks: the tarsi are much compressed, and the toes are longer and more webbed. They walk and fly indifferently, but swim and dive with facility. Their food consists almost exclusively of fishes and insects.

HARELDA. HARELD.

Generic Character.

Rostrum basi inerme, brevissimum, gracile, ad apicem angustum, acutum; mandibulâ superiore apice ungue minuto instructo.
Nares lineares, basales.
Vertex elevata.
Cauda rectricibus intermediis elongatis, acuminatis.

Beak unarmed at its base, very short, slender, narrow towards the tip; the upper mandible furnished with a small nail at its tip.
Nostrils linear, basal.
Crown elevated.
Tail with its intermediate feathers elongated, and pointed.

HARELDA. Ray, Leach.
QUERQUEDULA. Briss.
CLANGULA. Fleming.

THE Harelds differ from the Garrots in having a shorter and more acute beak, and the tail-feathers being greatly elongated: the nostrils are much more linear, and the crown of the head more elevated. From the Pochards they are readily distinguished by the same character. There is but one species as yet ascertained, which is a native of the northern regions, and subsists on molluscous animals.

Griffith

NORTHERN HARELD.

LONG-TAILED HARELD.

(Harelda glacialis.)

HA. *alba, genis lateribusque colli maculâ flavâ, pectore, dorso, caudâ, alarum partibus nigris.*

White Hareld with a yellow spot on the cheeks and on the sides of the neck, with the breast, back, tail, and part of the wings black.

Anas glacialis. *Linn. Syst. Nat.* 1. 203. *Gmel. Syst. Nat.* 1. 529. *Lath. Ind. Orn.* 2. 864.

Anas longicauda ex insula Novæ Terræ. *Briss. Orn.* 6. 382.

Canard à longue queue. *Buff. Hist. Nat. Ois.* 9. 202.

Canard de Miclon. *Buff. Pl. Enl.* 1008. *Temm. man. d'Orn.* 558. *Id.* 2 *Edit.* ii. 860.

Le Canard de Terre-Neuve. *Cuv. Reg. Anim.* 1. 533.

Swallow-tailed Shieldrake. *Will. Aug.* 364.

Long-tailed Duck. *Penn. Brit. Zool.* 2. 283. *Penn. Arct. Zool.* 2. 501. *Penn. Arct. Zool. and App. p.* 76. female. *Edw. Glean. pl.* 280. *Lath. Gen. Syn.* 6. 528. *Walc. Syn.* 1. *pl.* 73. *Lew. Brit. Birds,* 7. *pl.* 262. *Don. Brit. Birds,* 5. *pl.* 111. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 363. *Wils. Amer. Orn. v.* viii. *p.* 93. 96. *pl.* lxx. *f.* 1. male. *f.* 2. female, *winter dress.*

YOUNG.—Anas hyemalis. *Linn. Syst. Nat.* 1. 202. *Gmel. Syst. Nat.* 1. 529.

Anas caudacuta, Harelda. *Raii, Syn.* 145.

Anas longicauda Islandica. *Briss. Orn.* 6. 379.

Querquedula Ferroensis. *Briss. Orn.* 6. 466. *pl.* 40. *f.* 2.

Sarcelle de Ferroe. *Buff. Hist. Nat. Ois.* 9. 278. *Buff. Pl. Enl.* 999.

Long-tailed Duck. *Edw. Glean. pl.* 156.

TWENTY-TWO inches in length : the beak is black, with a transverse band of red : the irides are orange : the top of the head, nape, face, and under part of the

neck, the long scapulary feathers, the belly, vent, and lateral tail-feathers are pure white: the cheeks and space under the throat are ash-coloured: on the sides of the neck is a large space of a chesnut-brown colour: the breast, back, rump, and the two middle tail-feathers (which are very long) are of a sooty brown: the sides of the body are ash-coloured: the tarsi and toes are yellow: the membranes blackish. The old female differs from the male in having a short tail, with its feathers bordered with white, and the two middle ones are not elongated: the forehead, throat, and eyelids are of a whitish-ash: the nape, front, and under part of the neck, as well as the belly and vent, are pure white: the top of the head and large space on the sides of the neck are blackish-ash: the breast is varied with ash-colour and brown: the feathers of the back, the scapulars, and wing-coverts are black in the middle, with their edges of a reddish-ash: the rest of the upper parts are sooty brown: the beak is bluish, banded with yellow: the irides are clear brown: the legs are lead colour. The young of the year differ but little from the old female: they have the face whitish, varied with numerous brown or ashy spots: the throat, fore part of the neck, and the nape of an ashy-brown: the under part of the neck, a large spot behind the eyes, the belly, and vent white: the breast and thighs varied with spots of brown and ash-colour. The male at the age of one and two years has not the top of the head and the nape of a pure white: these parts, the throat, and the fore part of the neck are of a blackish-brown, varied with spots of white and ash-colour: the feathers of the scapulars are white or

ashy, or yellowish-brown, or whitish, varied with large spots of a deeper colour: the two middle tail-feathers exceed the others rather more than an inch.

The trachea of this bird is of a singular construction, and differs from that of the other Anatidæ: it rather increases in size at each extremity: at the lower end, close to the labyrinth, one side is flattened, and instead of the bony rings continuing round of their full breadth, this part is crossed with four distant linear bones as fine as a thread, which support a delicate transparent membrane three quarters of an inch in length, and almost three-eighths of an inch broad at the base: below this ribbed membrane projects the bony part of the labyrinth, with a tympanum of a kidney shape, placed transversely to the trachea, the middle of which is flat and membranaceous: the opposite side of the labyrinth is depressed, and from the bottom of this part the branchiæ take their origin.

This species inhabits the arctic seas, and, like the other natives of those frigid regions, migrates southwards during the inclemency of the winter, though it is said that some remain at all times in those ungenial climes. They occur in considerable flocks in the Orkneys from October to April, and a few visit the southern parts of Britain during that period: they mostly reside on the sea-coasts, where they can procure plenty of mollusca, upon which they chiefly subsist. They fly very swiftly, take short excursions, and are lively, restless birds: they are met with in large flocks in North America; and of an evening their loud and confused noise may be heard in calm

weather at the distance of several miles. They breed in Spitzbergen, Iceland, and other northern parts, making their nest among the grass near the sea; and about the middle of June lay from ten to fourteen bluish-white eggs: the nest is lined with the down from the breast of the female, which is said to be equally valuable with that of the Eider. They are hardy birds and excellent divers, and, from the nature of their food, their flesh is rancid and fishy, and held in no great estimation.

CLANGULA. GARROT.

Generic Character.

Rostrum capite brevior, basi inerme, angustum, ad apicem ferè rectum; mandibulâ superiore apice ungue parvo instructo.	*Beak* shorter than the head, its base simple, narrow, nearly straight towards the tip; the upper mandible furnished with a small hook.
Nares ovales, basales.	*Nostrils* oval, basal.
Cauda rectricibus acuminatis, aut obtusis, haud elongatis.	*Tail* with its feathers acuminated, or blunt, not elongated.

CLANGULA. Fleming, Leach.
QUERQUEDULA. Briss.

THE Garrots have a short beak, with its sides nearly straight, and not tapering, as in the Hareld: the crown is scarcely so much elevated: the nostrils are more oval; and the tail is considerably shorter than in the last-mentioned genus: in one species this part has its feathers pointed at the tip, whereas it is very obtuse in the others. The structure of the trachea is very different from that of any other genus of this family, but approximates towards that of the Mergansers.

HARLEQUIN GARROT.

(Clangula histrionica.)

Cl. *fusca albo cæruleoque varia, auribus, temporibus lineâ germinâ, collari fasciâque pectorali albis* (mas.) : *vel grisea, auribus albis, remigibus primoribus nigricantibus* (femina.)

Brown Garrot varied with white and blue, with the ears, a germinated line on the temples, collar round the neck and pectoral fascia white (*male*) : or grey, with the ears white, and the primary quills dusky (*female.*)

Anas histrionica. *Linn. Syst. Nat.* 1. 204. *Gmel. Syst. Nat.* 1. 534. *Lath. Ind. Orn.* 2. 849.

Anas torquata. *Briss. Orn.* 6. 362.

Le Canard à collier de Terre-Neuve. *Buff. Hist. Nat. Ois.* 9. 250. *Buff. Pl. Enl.* 798.

Canard à collier, ou histrion. *Temm. man. d'Orn.* 573. *Id.* 2 *Ed.* ii. 878.

Le Canard Arlequin. *Cuv. Reg. Anim.* 1. 533.

Dusky and Spotted Duck. *Edw. Glean. pl.* 99.

Harlequin Duck. *Penn. Arct. Zool.* 2. 490. *Lath. Gen. Syn.* 6. 485. *Mont. Orn. Dict.* 1. *Wils. Amer. Orn. v.* viii. *p.* 139. *pl.* xcii. *f.* 4. male.

Female.—Anas minuta. *Linn. Syst. Nat.* 1. 204. *Gmel. Syst. Nat.* 1. 534.

Anas torquata. *Gmel. Syst. Nat.* 1. 514.

Querquedula freti Hudsonis. *Briss. Orn.* 6. 469.

La Sarcelle brune et blanche. *Buff. Hist. Nat. Ois.* 9. 287. *Buff. Pl. Enl.* 789.

Little Brown and White Duck. *Edw. Glean. pl.* 157.

Length eighteen inches : beak black : irides brown : the head and neck blackish-violet : a large space between the beak and the eye, a spot behind each eye, a longitudinal band on the sides of the neck, a collar

HARLEQUIN GARROT.

surrounding the neck, a broad semilunar mark on the sides of the breast, and part of the scapulars, are all of a pure white: the lower part of the neck and the breast are ashy-blue: the sides of the body are bright red: the belly brown: the back, wings, and rump are black, glossed with blue and violet: the speculum of the wing is of a very deep violet: the legs and membranes are of a blackish-blue. The female differs considerably: all the upper part of her plumage is deep brown, shaded with ash: towards the forehead, and a little before the eyes, is a very small white spot: towards the base of the beak and on the region of the ears is a large white space: the throat is whitish: the breast and belly are whitish, shaded and spotted with brown: the sides of the body are reddish-brown: in size she is less than the male. The young of the year are varied with brown and whitish, and may be distinguished by the rudiments of the white spots which are apparent on the sides of the head. The white collar on the neck of the male does not appear till the second year.

The Harlequin Garrot, so called from the singularity of its markings, is an inhabitant of the northern regions of the two worlds, and of the eastern parts of Europe, and two specimens have been killed in Scotland. Little more, however, is known of its manners than that it swims and dives well, flies swift and to a great height, and has a whistling note. It is said to frequent bays and rivers during the summer months, and to be fond of shady places, making its nest on shore amongst shrubs, especially on the borders of the most rocky and rapid torrents. The female lays

ten or twelve pure white eggs, about the size of those of a pigeon: the young are very prettily speckled: in the autumn, when they are capable of flying, they migrate southward, to pass the winter in the open sea. Notwithstanding the food of this bird chiefly consists of small fish and molluscous animals, its flesh is said to be excellent.

GOLDEN-EYE GARROT.

(Clangula chrysopthalmos.)

Cl. *nigro alboque varia, capite tumido violaceo, sinu oris maculâ albâ.*

Garrot varied with black and white, with a tumid violet head, with a white spot at the corner of the gape.

Anas Clangula. *Linn. Syst. Nat.* 1. 201. *Gmel. Syst. Nat.* 1. 523. *Briss. Orn.* 6. 416. *pl.* 37. *f.* 2. *Raii, Syn.* 142. *A. Lath. Ind. Orn.* 2. 867.

Le Garrot. *Buff. Hist. Nat. Ois.* 9. 222. *Buff. Pl. Enl.* 802. *Cuv. Reg. Anim.* 1. 534.

Canard Garrot. *Temm. man. d'Orn.* 566. *Id.* 2 *Edit.* ii. 870.

Golden-eye. *Penn. Brit. Zool.* 2. 276. *Penn. Arct. Zool.* 2. 486. *Alb. Birds,* 1. *pl.* 96. *Lath. Gen. Syn.* 6. 535. *Lew. Brit. Birds,* 7. *pl.* 255. *Walc. Syn.* 1. *pl.* 69. *Mont. Orn. Dict.* 1. *and Sup. Lath. Syn. Sup.* ii. 355. *Lath. Linn. Trans.* iv. 118. *pl.* 15. *f.* 12. (trachea.) *Bew. Brit. Birds,* 2. 367. *Wils. Amer. Orn.* *v.* viii. *p.* 62. *pl.* lxvii. *f.* 6. male.

Young.—Anas glaucion. *Linn. Syst. Nat.* 1. 401. *Gmel. Syst. Nat.* 1. 525. *Lath. Ind. Orn.* 2. 868.

Morillon, or Grey-headed Duck. *Lath. Gen. Syn.* 6. 537. *Bew. Brit. Birds,* 2. 371.

GOLDEN-EYE GARROT.

Above eighteen inches in length: beak black: irides brilliant yellow: at the opening of the beak is a large white space; the rest of the head and the upper part of the neck are of a very deep purple green: the lower part of the neck, the breast, belly, vent, sides of the body, greater wing-coverts, and part of the scapulars pure white: the back, rump, and the rest of the scapulars deep black: the thighs and tail are ashy-black: the tarsi and toes are orange-yellow; the membranes black. The female has all the head and the upper part of the neck of a very deep brown: the lower part of the neck, the belly, and vent are pure white: the breast and sides of the body are deep brown, edged with whitish: the feathers of the back and scapulars are blackish in the middle, edged and tipped with deep ash: the wing-coverts partly white and partly black: the tip of the beak and the irides yellowish: the tarsi and toes bright yellow. The young males of the year resemble the old females: their beak is blackish-ash: the irides greenish-yellow: the toes yellowish-brown: at the age of one year the white space at the side of the beak becomes apparent, and the feathers of the head become black without any green reflections.

The trachea of the male of this species is of a very extraordinary and singular construction: nearly about its middle it swells out to at least five times its common diameter, three concentric rings, of which this part is formed, falling obliquely into one another, when the windpipe is relaxed; but when stretched, this part swells out to its full size, the rings being then drawn apart: this expansion extends for about

three inches; three more below this it again forms itself into a hard cartilaginous shell, or labyrinth, of an irregular figure, and nearly as large as a walnut: from the bottom of this the trachea branches off to the two lobes of the lungs; that branch which goes to the left lobe being three times the diameter of the right.

The Golden-eye is a native of the arctic regions, and occurs on both continents, flying along the sea-coasts, and the lakes and rivers of the interior: they appear but sparingly in Britain, visiting us in small flocks during the winter, and feeding chiefly in rivers contiguous to the sea, on shell-fish, small fry, &c. They swim and dive well, but seldom walk on shore, and then in a very awkward waddling manner: when flying they make a loud whistling noise with their wings. They retire northward to breed, and are said to build in hollow trees, the female laying fourteen pure white eggs.

BUFFEL-HEADED GARROT.

(Clangula albeola.)

CL. *alba dorso remigibusque nigris, capite colloque cærulescente sericeo nitente, occipite albo;* femina *maculâ aurium alarumque albâ.*

White Garrot with the back and quills black, the head and neck bluish with a silken gloss, the occiput white; *female* with a white spot on the ears and wings.

Anas albeola. *Linn. Syst. Nat.* 1. 199. *Gmel. Syst. Nat.* 1. 517. *Lath. Ind. Orn.* 2. 866.
Anas bucephala. *Linn. Syst. Nat.* 1. 200. *Gmel. Syst. Nat.* 1. 521.
Querquedula Ludoviciana. *Briss. Orn.* 6. 461. *pl.* 41. *f.* 1.
Anas hyberna. *Briss. Orn.* 6. 349.
Sarcelle blanche et noire, ou la Religieuse. *Buff. Hist. Nat. Ois.* 9. 284. *Buff. Pl. Enl.* 948.
Petit canard à grosse tête. *Buff. Hist. Nat. Ois.* 9. 249.
Little Black and White Duck. *Edw. Glean. pl.* 100.
Spirit Duck. *Penn. Arct. Zool.* 2. 487.
Buffel-headed Duck. *Catesby, Carol.* 1. *pl.* 95. *Penn. Arct. Zool.* 2. 489. *Lath. Gen. Syn.* 6. 533. *Wils. Amer. Orn. v.* viii. *p.* 51. *pl.* lxvii. *f.* 2. male; *f.* 3. female.
FEMALE.—Anas rustica. *Linn. Syst. Nat.* 1. 201. *Gmel. Syst. Nat.* 1. 524.
Querquedula Carolinensis. *Briss. Orn.* 6. 464.
Sarcelle de la Caroline. *Buff. Hist. Nat. Ois.* 9. 286.
Little Brown Duck. *Catesb. Carol.* 1. *pl.* 98. *Lath. Gen. Syn.* 6. 534.

LENGTH sixteen inches: beak near an inch and a half long, and black: the head and neck green-gold, with a gloss of violet in some lights: from behind each eye the feathers are white, passing in a broad patch to the back of the head: the lower part of the neck all round, the breast, and under parts are white: the outer scapulars are white, forming a longitudinal band on each side of the back, which, with the rest of the scapulars, is black: the lesser wing-coverts are dusky, edged with white: the middle ones white: the greater, down the middle of the wing, white; but those on each side black: quills dusky black; some of the inner ones marked with white on the inner webs: tail cinereous; the three outer feathers edged outwardly with white; the shape of it cuneiform: legs

orange : claws black. The female is smaller than the male : length fourteen inches : beak black : irides hazel : the head and upper parts deep brown : behind the eye an oval white spot : throat and under parts pale grey : greater quills deep brown ; the lesser ones the same, but outwardly edged with white, forming a patch on the wing : tail brown : legs black.

Common on the sea-shores, rivers, and lakes of the United States of America, during the autumn and winter : about the middle of April, or early in May, they retire to the north to breed, and are said to make their nests in trees in the woods near ponds : the young of both sexes resemble the females. They are expert divers, and fly with great rapidity : their note is a short *quak*. They generally fly in pairs in the early part of the winter, but towards the spring they associate in flocks. They feed chiefly on shell-fish and shrimps, and though they are often exceedingly fat, their flesh is not very excellent.

FULIGULA. POCHARD.

Generic Character.

Rostrum capite longiùs, basi inerme, latum, depressum, ad apicem paulò dilatatum.	*Beak* as long as the head, its base unarmed, broad, depressed, a little dilated near the tip.
Nares subovales, basales.	*Nostrils* suboval, basal.
Cauda mediocris, rectricibus plerumque acutis.	*Tail* moderate, its feathers generally acute.
Pedes membranis magnis instructi.	*Feet* furnished with large membranes.

FULIGULA. Ray, Leach.
NYROCA. Fleming.
PENELOPE. Briss.
GLAUCIUM. Briss.
QUERQUEDULA. Briss.

THE Pochards have a broad and depressed beak, which is destitute of any appendage at its base: it is much larger than in the Garrots or Harelds, and is rather dilated, or spathiform, towards the tip: the tail is usually short, and in most cases the feathers of which it is composed have their tips acute. There are several species belonging to this genus; and their tracheal organization, as far as ascertained, seems to correspond.

RED-CRESTED POCHARD.

(Fuligula rufina.)

FU. *cristata nigra, dorso alisque fuscis, capite colloque testaceo-rubris, vertice rufescente, speculo albo nigro marginato.*

Crested Black Pochard with the back and wings brown, the head and neck testaceous-red, the crown reddish, the speculum of the wing white, edged with black.

Anas rufina. *Pallas.—Gmel. Syst. Nat.* 1. 541. *Lath. Ind. Orn.* 2. 870.

Anas capite ruffo major. *Raii, Syn.* 140.

Anas fistularis cristata. *Briss. Orn.* 6. 398.

Canard siffleur huppé. *Buff. Hist. Nat. Ois.* 9. 282. *Buff. Pl. Enl.* 928. *Temm. man. d'Orn.* 560. *Id.* 2 *Ed.* ii. 864.

Le Millouin huppé. *Cuv. Reg. Anim.* 1. 535.

Red-crested Duck. *Lath. Gen. Syn.* 6. 544.

LENGTH twenty-three inches: beak bright red; its hook white: irides bright red: the head is clothed with several long silken feathers, which form a large crest, which, with the cheeks, throat, and upper part of the neck, is reddish-brown, or bay-colour: the lower part of the neck, the breast, belly, and vent are deep black: the back, wings, and tail are bright brown: the sides of the body, the bend of the wing, a large spot on the sides of the back, the speculum, and the base of the quills whitish: the tarsi and toes are bright red; the membranes black. The female is less: the top of the head, the occiput, and the nape are deep brown: the crest is less tufted than in the male: the cheeks, throat, and sides of the neck are

ashy-white: the breast and sides of the body are yellowish-brown: the belly and vent are grey: the back, wings and tail are brown, slightly shaded with ochraceous: the back is without the white spot on its sides: the speculum and half the wing are greyish-white; the rest of the wing is bright brown: the base of the quills is white, shaded with brown: the beak, tarsi, and toes are reddish-brown.

The trachea of this bird, which is broad immediately beneath the upper larynx, becomes suddenly very narrow, but towards the middle of its length its diameter becomes very large, and then narrow: the lower larynx is formed of two dilatations, that on the left side being largest and highest, with osseous ramifications, which are covered with a delicate membrane.

A native of the north-eastern parts of Europe, and part of Asia, appearing periodically in Hungary, Austria, and Turkey, and occasionally as far west as the lakes of Switzerland. It likewise migrates to the Caspian Sea. It feeds upon mollusca and aquatic vegetables.

TUFTED POCHARD.

(Fuligula cristata.)

Fu. *cristâ dependente, corpore nigro, abdomine speculoque alarum albis.*

Pochard with a depending crest, the body black, the abdomen and speculum of the wing white.

Anas Fuligula. *Linn. Syst. Nat.* 1. 207. *Gmel. Syst. Nat.* 1. 543. *Lath. Ind. Orn.* 2. 869.

Anas cristata. *Raii, Syn.* 142. *A.*

Glaucium minus. *Briss. Orn.* 6. 411. *pl.* 37. *f.* 1.

Morillon. *Buff. Hist. Nat. Ois.* 9. 227. *Buff. Pl. Enl.* 1001. *Cuv. Reg. Anim.* 1. 535.

Canard morillon. *Temm. man. d'Orn.* 568. *Id.* 2 *Edit.* ii. 873.

Tufted Duck. *Penn. Brit. Zool.* 2. 274. *Penn. Arct. Zool.* 2. 573. *Alb. Birds,* 1. *pl.* 95. *Hayes, Brit. Birds, pl.* 26. *Lath. Gen. Syn.* 6. 540. *Lath. Syn. Sup.* ii. 355. *Lath. Linn. Trans.* iv. 117. *Walc. Syn.* 1. *pl.* 78. *Lew. Brit. Birds,* 7. *pl.* 257. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 372. *Wils. Amer. Orn. v.* viii. *p.* 60. *pl.* lxvii. *f.* 5. male.

Le Canard brun. *Buff. Hist. Nat. Ois.* 9. 252. *Buff. Pl. Enl.* 1007.

Lapmark Duck. *Penn. Arct. Zool.* 2. 576. *M.*

Young.—Anas scandiaca. *Gmel. Syst. Nat.* 1. 520. *Lath. Ind. Orn.* 2. 859.

Brown Duck. *Penn. Brit. Zool. pl. Q.*

Lapmark Duck. *Lath. Gen. Syn.* 6. 515.

Length seventeen inches: beak bright blue, with its hook black: irides bright yellow: on the top of the head is a crest consisting of long and slender feathers: this, and also the head, neck, and breast, are black glossed with violet and green: the back, wings, and rump are blackish-brown, with bronzed

Griffith

RED-CRESTED POCHARD.

reflections; these parts are slightly sprinkled with brown dots: the belly, sides, and a transverse band on the wing, are pure white: the vent is blackish-brown: the tarsi and toes are bluish; the membranes black. The old female is less, but has a crest, the feathers of which are shorter: the crest, head, neck, breast, and top of the back are dull black, shaded with deep brown: the back and wings are dull blackish-brown, spotted with small brown dots: on the breast and on the sides are some large spots of reddish-brown: the belly is whitish, shaded with reddish-brown: the speculum is smaller than in the male: the beak and legs are of a deeper colour: the irides are bright yellow. The young have no crest: on the sides of the beak is a large whitish spot: on the forehead, and oftentimes behind the eyes, they are white: the head, neck, and breast are dull brown, the last varied with reddish-brown: the feathers of the back and the wings are blackish-brown, edged with brighter brown: the sides are reddish-brown: on the wing is a small whitish band: the abdomen is varied with ash and brown: the irides are dull yellow. The young males have the white on the belly more pure than the young females.

"The trachea of the male of this bird greatly resembles, in the drum-like portion of it, that of the Red-headed Pochard; but the bony, box-like portion is elevated, and scarcely to be distinguished from that of the Scaup, except in being smaller. The trachea also itself is of smaller dimensions throughout."—*Latham.*

Found in the arctic regions of both continents;

preferring the sea-coasts during the spring, and the lakes and seas of the interior during the autumn: on the approach of the latter season these birds prepare to visit the more temperate regions, and arrive in England and other southern parts, where they remain till the spring; continuing with us as late as the latter end of March. They are difficult to shoot, owing to their excessive diving. They breed in the polar regions, though some are supposed to propagate in more genial climes. Their nourishment is similar to that of the rest of the genus; but their flesh, it is affirmed, is much better tasted, and generally very tender.

ICELAND POCHARD.

(Fuligula Islandica.)

Fu. *cristata nigra, jugulo pectore abdomineque albis, pedibus croceis.*

Crested-black Pochard with the jugulum, breast, and abdomen white, the legs saffron-coloured.

Anas Islandica. *Gmel. Syst. Nat.* 1. 541. *Lath. Ind. Orn.* 2. 871.

Iceland Drake. *Penn. Arct. Zool.* 2. 574. *H. Lath. Gen. Syn.* 6. 545.

Prevailing colour black: the head crested: the fore part of the neck, breast, and belly white: the legs saffron colour. Inhabits Iceland, where it is called *Hrafn-ond.*

RED-HEADED POCHARD.

(Fuligula ferina.)

Fu. *cinereo undulata, capite brunneo, fasciâ pectorali crisso uropygioque nigris.*

Pochard waved with ash-colour, with the head brown, a band on the breast, the vent and rump black.

Anas ferina. *Linn. Syst. Nat.* 1. 203. *Gmel. Syst. Nat.* 1. 530. *Lath. Ind. Orn.* 2. 862.

Anas rufa. *Gmel. Syst. Nat.* 1. 575. *Lath. Ind. Orn.* 2. 863. male.

Anas fera fusca. *Raii, Syn.* 143. *A.*

Penelope. *Briss. Orn.* 6. 384. *pl.* 35. *f.* 1.

Millouin. *Buff. Hist. Nat. Ois.* 9. 216. *Buff. Pl. Enl.* 803. *Cuv. Reg. Anim.* 1. 535.

Canard Milouin. *Temm. man. d'Orn.* 564. *Id.* 2 *Edit.* ii. 868.

Poker, Pochard, Red-headed Wigeon. *Penn. Brit. Zool.* 2. 284. *Penn. Arct. Zool.* 2. 491. *Alb. Birds,* 2. *pl.* 98. *Lath. Gen. Syn.* 6. 523. *Lath. Syn. Sup.* ii. 354. *Lath. Linn. Trans.* iv. 116. *pl.* 14. *f.* 5, 6. (trachea.) *Lew. Brit. Birds,* 7. *pl.* 253. *Mont. Orn. Dict.* 2. *and Sup. Bew. Brit. Birds,* 2. *pl.* 356. *Wils. Amer. Orn. v.* viii. *p.* 110. *pl.* xc. *f.* 6. male.

Eighteen inches in length: the beak black at its base and point, and deep blue in the middle: irides orange: the head and neck are very brilliant brownish-red: the upper part of the back, the breast, and rump are dull black: the rest of the back, the scapulars, wing-coverts, sides of the body, thighs, and vent are whitish-ash, rayed with numerous close zigzag ashy-blue lines: the belly is whitish, varied with nearly imperceptible ashy zigzag lines: the quills and tail are deep ash: the tarsi and toes are bluish; the mem-

branes black. The female is less, and has the top of the head, the sides and back of the neck, the top of the back, and the breast of a reddish-brown; but the feathers of the last part are bordered and shaded with reddish-white: the space between the beak and the eye, the region of the eyes, the throat, and fore part of the neck are white, spotted with reddish: on the sides are several large brown spots: the wings are ash-coloured, spotted with white: the zigzag lines on the back are less distinct than in the male: the middle of the belly is whitish: and of the beak dull bluish. The young males of one year resemble the female; those of two years have the red on the head and on the neck more bright: the colour of the breast is generally blackish-brown, often shaded with clear brown: on the back and sides of the body are several spots.

Dr. Latham gives the following comparative account of the trachea of this species: "The trachea is shorter, but otherwise like that of the Scaup (Fuligula Marila), and of nearly the same diameter throughout. The drum-like labyrinth is more round on the upper side, but crossed with a small bony partition, as in that bird. The bony box, of which the other portion consists, is scarcely elevated on this side, and on the other much less so than in the Scaup: it likewise forms an obtuse angle with the rest of the trachea; but in the Scaup it does not deviate from a continuation of a straight line, though forming a considerable enlargement."

This bird inhabits the northern parts of Europe, Asia, and America, migrating towards the south in

the autumn, at which season it affects fresh waters in the vicinity of the sea, and makes its appearance in the fens of Lincolnshire and other marshy places in Britain, though not in very great plenty. These birds do not breed in England, but retire northward for that purpose: the female is said to lay twelve or thirteen greenish-white eggs. Their flesh is reckoned particularly good, and is greatly esteemed for food. This property has rendered their capture of some importance; and as they cannot be taken by means of the usual decoy (of which a full account is given in the description of the Wild Duck), owing to their diving propensities, a different method is employed, which is thus mentioned by Montagu: "Poles are erected at the avenues of the decoy, and after a great number of these birds have collected for some time on the pool (to which wild fowl resort only by day, and go to the neighbouring fens to feed by night), a net is at a given time erected by pulleys to these poles, beneath which a deep pit has previously been dug: and as these birds go to feed just as it is dark, and are said always to rise against the wind, a whole flock is taken together in this manner; for when once they strike against the net, they never attempt to return, but flutter down the net till they are received into the pit, whence they cannot rise; and thus we are told twenty dozen have been taken at one catch."

It has been said that this species will not live in confinement. Montagu, however, states, that "no bird appears sooner reconciled to the menagerie." One that was in his possession, that was badly

wounded with a broken wing, took to feeding on corn immediately, and was, after three years' confinement, in high health, and very tame.

CANVAS-BACKED POCHARD.

(Fuligula vallisneria.)

Fu. *fronte genisque obscure fuscis, capite, colloque parte superiore fulvis, inferiore nigro cincto, dorso, scapularibus, ventreque albis, lineis nigris angustissimis pennicillatis, tectricibus alarum superioribus griseis, nigricante maculatis, remigibus pallidè ardosiaceis.*

Pochard with the forehead and cheeks dull brown, the head and upper part of the neck fulvous, the lower part with a black belt, the back, scapulars, and belly white, pencilled with very narrow black lines, the upper wing-coverts grey, spotted with black, the quills pale slate-colour.

Canvas-backed Duck. (*Anas vallisneria.*) *Wils. Amer. Orn. v.*viii. *p.* 103. *pl.* lxx. *f.* 5. *Sabine, Frank. Journ. App. p.* 699.

To the exertions of the indefatigable Wilson naturalists are indebted for a knowledge of this new and interesting species, which is thus described by him: "The canvas-back is two feet long, and three feet in extent, and when in good order weighs three pounds: the beak is large, rising high in the head, three inches in length, and one inch and three-eighths thick at the base, of a glossy black: eye very small: irides dark red: cheeks and fore part of the head blackish-brown: rest of the head and greater part of the neck bright glossy reddish-chesnut, ending in a

broad space of black that covers the upper part of the breast, and spreads round to the back: back, scapulars, and tertials white, faintly marked with an infinite number of transverse waving lines, or points, as if done with a pencil; whole lower part of the breast, also the belly, white, slightly pencilled in the same manner; scarcely perceptible on the breast, pretty thick towards the vent: wing-coverts grey, with numerous specks of blackish: primaries and secondaries pale slate, two or three of the latter of which nearest the body are finely edged with deep velvety black; the former dusky at their tips: tail very short, pointed, consisting of fourteen feathers of a hoary brown: vent and tail-coverts black: lining of the wing white: legs and feet very pale ash, the latter three inches in width." The female, he adds, "is somewhat less than the male: the crown is blackish-brown: cheeks and throat of a pale drab: neck dull brown: breast, as far as the black extends on the male, dull brown, skirted in places with pale drab: back dusky white, crossed with fine waving lines: belly of the same dull white, pencilled like the back: wings, feet, and beak as in the male: tail-coverts dusky: vent white, waved with brown. The windpipe of the male has a large, flattish, concave labyrinth, the ridge of which is covered with a thin transparent membrane; where the trachea enters this it is very narrow, but immediately above swells to three times that diameter."

These birds arrive in the United States from the north about the middle of October, frequenting the large rivers, where a particular kind of grass-like plant is in plenty, upon the roots of which they feed: upon

their first arrival they are very lean, but they soon recover, and become fat and in good order: their flesh is greatly esteemed by the American epicure; they are extremely shy, and can rarely be approached unless by stratagem. When wounded in the wing they dive to such prodigious distances and with such rapidity, continuing it so perseveringly and with so much cunning and vigour, as generally to render the pursuit hopeless. During the day they are dispersed about, but towards evening they collect in large flocks, and sometimes in such multitudes as to cover several acres of the rivers, and when they rise suddenly, produce a noise resembling thunder. Their nest and eggs have not been discovered.

Specimens of these birds were obtained during the unfortunate expedition of Captain Franklin towards the northern Frozen Ocean.

SCAUP POCHARD.

(Fuligula Marila.)

FU. *nigra, humeris cinereo-undulatis, abdomine speculoque alari albis* (mas.): *vel fusco-ferruginea, speculo alarum abdomine capitisque annulo ad rostri basin albis* (femina.)

Black Pochard with the shoulders waved with ash-colour, the abdomen and speculum of the wing white (*male*): or, rusty-brown, with the speculum of the wing, the abdomen, and a ring on the head at the base of the beak white (*female.*)

Anas Marila. *Linn. Syst. Nat.* 1. 196. *Gmel. Syst. Nat.* 1. 509. *Lath. Ind. Orn.* 2. 853.

Fuligula Gesneri. *Raii, Syn.* 142. *A.*
Glaucium minus striatum. *Briss. Orn.* 6. 416.
Anas frænata. *Mus. Carls. fasc.* ii. *pl.* 38. female.
Le Millouinan. *Buff. Hist. Nat. Ois.* 9. 221. *Buff. Pl. Enl.* 1002. *Cuv. Reg. Anim.* 1. 535.
Canard Milouinan. *Temm. man. d'Orn.* 562. *Id.* 2 *Edit.* ii. 865.
Scaup Duck. *Penn. Brit. Zool.* 2. 275. *pl.* 100. *Penn. Arct. Zool.* 2. 498. *Lath. Gen. Syn.* 6. 500. *Lath. Syn. Sup.* ii. 351. *Lath. Linn. Trans.* iv. 128. *pl.* 14. *f.* 3, 4. (trachea.) *Walc. Syn.* 1. *pl.* 60. *Lew. Brit. Birds,* 7. *pl.* 250. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 339. *Wils. Amer. Orn.* v. viii. *p.* 84. *pl.* lxix. *f.* 3.
White-faced Duck. *Sowerb. Brit. Miscell.* 2. *pl.* 62.

Above eighteen inches in length: the beak is clear blue; but the nostrils are whitish, and the hook, as well as the edges of the mandibles, are black: the irides are bright yellow: all the head and the upper part of the neck black, glossed with green: the lower part of the neck, the breast, and rump, are deep black: the top of the back and the scapulars are whitish, rayed with distant and fine zigzag black lines: the wing-coverts are marbled with black and white: on the wing is a white band: the belly and sides are pure white: the vent is rayed with brown zigzags: the tarsi and toes are ash; the membranes blackish. The female is smaller, and has a large white band surrounding the base of the beak: the rest of the head and the neck are blackish-brown: the lower part of the neck, the breast, and the rump are deep brown: the back and scapulars are striped with zigzags of black and white: the sides are spotted with brown, and rayed with zigzags of the same colour: the irides are dull yellow. The young males

resemble more or less the old females: the base of the beak is surrounded by several white feathers: the head and neck are plain black, without the greenish reflections, but they are varied by several blackish-brown feathers: the white on the back is varied with brown spots, and the zigzag lines are closer than in the old bird: the belly is dirty white, spotted with grey: the sides have a blackish-brown spot thereon. In the young females the zigzag lines on the back are indistinct, and are placed on a brown ground.

"The trachea of the male of this species (Latham says) is rounded on one side, and flat on the other: in shape irregular: the flat surface is for the most part open, except round the rim, and an irregular bony arch crossing it from side to side: independent of this, the surface is covered with a delicate, fine, elastic membrane stretched over it, giving it the appearance of the head of a drum."

The Scaup is well known in England. It inhabits Iceland, and the more northern parts of the continents of Europe and America: it is also common on the northern shores of Siberia. It is never taken in a decoy, and rarely observed upon fresh water, except near the mouths of large rivers, or in lakes close to the sea. It breeds in the polar regions, and feeds upon small fishes, shell-fish, insects, and marine plants.

It is easily tamed, and in the course of a few days will become quite familiar, take bread out of the person's hand offering it, and will eat barley freely. Montagu relates a singular physiological fact that he observed in a specimen of this bird, which he

NYROCA POCHARD.

received in a sickly state, and shortly after died: "the cause of its death," he observes, "appeared to be in the lungs, and in the membrane that separates them from the other viscera; this last was much thickened, and all the cavity within was covered with mucor, or blue mould."

NYROCA POCHARD.

(Fuligula Nyroca.)

Fu. *atro-olivacea, capite collo pectoreque castaneis, uropygio nigro, abdomine crisso maculâque alarum albis.*

Dark-olivaceous Pochard with the head, neck, and breast chesnut, the rump black, the abdomen, vent, and spot on the wing white.

Anas Nyroca. *Gmel. Syst. Nat.* 1. 542. *Lath. Ind. Orn.* 2. 869.

Anas Africana. *Gmel. Syst. Nat.* 1. 522. *Lath. Ind. Orn.* 2. 875. *Linn. Trans.* xi. 178.

Anas leucophthalmus. *Beckstein. Temm. l. c.*

Sarcelle d'Egypte. *Buff. Hist. Nat. Ois.* 9. 273. *Buff. Pl. Enl.* 1000.

Canard à iris blanc, ou Nyroca. *Temm. man. d'Orn.* 571. *Id.* 2 *Edit.* ii. 876.

Le petit Millouin. *Cuv. Reg. Anim.* 1. 535.

Tufted Duck, var. *Lath. Gen. Syn.* 6. 541.

African Teal. *Lath. Gen. Syn.* 6. 555. *Mont. Orn. Dict. Sup.*

Ferruginous Duck. *Mont. Orn. Dict. Sup.*

Olive-tufted Duck. *Sow. Brit. Misc.* 1. *pl.* 21.

Castaneous Duck. *Mont. Orn. Dict. Sup. App.*

Sixteen inches in length: the beak is blackish-blue, with its hook black: irides white: the head,

neck, breast, and sides are very bright brownish-red: round the neck is a small collar of deep brown: beneath the under mandible is an angulated spot of pure white: the back and wings are blackish-brown, glossed with purple; these parts are sprinkled with small red dots: the speculum on the wing is white, tipped with black: the belly and under tail-coverts are pure white: the tarsi and toes are bluish-ash; the membranes black. The female is less: the top of the head, the neck, the breast, and the sides are brown, but all the feathers are tipped with bright reddish: the feathers on the upper parts of the plumage are blackish, tipped with clear brown: there is not any collar round the neck: the rest of the plumage resembles that of the male. The young of the year have the top of the head of a blackish-brown: all the feathers on the upper parts of the plumage are bordered and tipped with reddish-brown: the white on the belly is shaded with clear brown.

The trachea of the male of this species is extremely narrow in its diameter, especially immediately beneath the glottis and towards the lower larynx; in the middle it is as large again: the lower larynx forms on the right side a bony protuberance, and on the left a tumid labyrinth composed of bony ramifications, which are covered with a membrane on the outside, but the part attached to the tube is entirely bony.

Inhabits the large lakes and rivers of the eastern parts of Europe, migrating regularly into Germany, and occasionally into Holland, France, and England; but in the latter country very rarely, and only during

the winter. It builds in the marshes among reeds and rushes, the female laying nine or ten eggs of a white colour, slightly tinged with green. It is said to feed chiefly upon insects, small frogs, aquatic plants and their seeds, and but rarely on small fishes.

ST. DOMINGO POCHARD.

(Fuligula Dominica.)

Fu. *rufa, capite anteriore fuliginoso, speculo alarum candido.*
Red Pochard with the anterior portion of the head sooty-coloured, the speculum of the wing snowy.
Anas Dominica. *Linn. Syst. Nat.* 1. 201. *Gmel. Syst. Nat.* 1. 521. *Lath. Ind. Orn.* 2. 874.
Anas spinosa. *Gmel. Syst. Nat.* 1. 522. *Lath. Ind. Orn.* 2. 874.
Querquedula Dominicensis. *Briss. Orn.* 6. 472. *pl.* 41. *f.* 2.
Sarcelle rouge à longue queue de la Guadeloupe. *Buff. Hist. Nat. Ois.* 9. 283. *Buff. Pl. Enl.* 968.
Sarcelle à queue épineuse. *Buff. Hist. Nat. Ois.* 9. 282. *Buff. Pl. Enl.* 967.
Spinous-tailed Teal. *Lath. Gen. Syn.* 6. 555.
St. Domingo Teal. *Lath. Gen. Syn.* 6. 554.

A VERY small species, scarcely measuring a foot in length: its beak is black: the fore part of the head and the throat are soot-coloured: the hind part of the neck reddish: the back, scapulars, upper tail-coverts, sides, and rump, are rufous, with the middle of the feathers blackish: the wing-coverts are grey-brown mixed with white; but some of them are

entirely white: the quills brown; the six middle ones white half way, or upwards, from the base: the breast and belly grey-brown, varied with white: the lower belly, thighs, and under tail-coverts pale rufous, mixed with grey-brown: the tail dusky, wedge-shaped, the feathers pointed at the ends; the shafts black: the legs brown. The other sex has the beak blue: the top of the head black; with a streak of the same colour passing through the eye, and another beneath: between these white: prevailing colour of the plumage dusky brown, varied with darker; the under parts being palest, especially the chin: wings with a few white markings on their outer coverts: tail coloured as the rest of the body; short; and the tips of the feathers unwebbed, and prolonged into a sharp point: legs dirty flesh-colour.

Inhabits St. Domingo, and other West India islands.

MEXICAN POCHARD.

(Fuligula fulva.)

Fu. *fulva, corpore superiore alisque fulvo fuscoque striatis, caudâ albo nigroque variâ.*

Fulvous Pochard with the superior part of the body and wings striped with fulvous and brown, the tail varied with black and white.

Anas fulva. *Gmel. Syst. Nat.* 1. 530. *Lath. Ind. Orn.* 2. 863.
Penelope Mexicana. *Briss. Orn.* 6. 390.
Mexican Pochard. *Lath. Gen. Syn.* 6. 524.

"The beak in this is dusky ash-colour: the eyes black: head, neck, breast, belly, thighs, and under tail-coverts fulvous: back, scapulars, wing-coverts, and rump transversely barred fulvous and brown: quills not much unlike the last (*Common Pochard*): tail black and white: legs as the beak: claws black. Inhabits Mexico."—*Latham.*

FERRUGINOUS POCHARD.

(Fuligula ferruginea.)

Fu. *fusco-rufa, abdomine albo, rostro dilatato pedibusque pallide cæruleis.*

Brown-red Pochard with the abdomen white, the beak dilated, and, with the legs, pale blue.

Anas rufa. *Linn. Faun. Suec. No.* 134?

Anas ferruginea. *Gmel. Syst. Nat.* 1. 528. *Lath. Ind. Orn.* 2. 866.

Red Duck. *Penn. Arct. Zool.* 2. 576.

Ferruginous Duck. *Penn. Brit. Zool.* 228. 5. *pl.* 99. *Lath. Gen. Syn.* 6. 526 *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* ii. 359.

Red-breasted Duck. *Lew. Brit. Birds,* 7. *pl.* 224.

An obscure species: thus described: "The beak is long and flattened, a little rounded at the base; colour pale blue: head, neck, and whole upper parts of the body reddish-brown: throat, breast, and belly the same, but paler: legs pale blue; webs black."

Pennant informs us that one of this species was killed in Lincolnshire, and that he had also received

it from Denmark. If it be the Anas Rufa of Linné, it is likewise a native of Sweden.

WESTERN POCHARD.

(Fuligula dispar.)

Fu. *alba subtus ferruginea, occipitis maculâ fronteque virescentibus, orbitis jugulo collari dorsoque nigris.*

White Pochard beneath rust-coloured, with a greenish spot on the occiput and forehead, the orbits, jugulum, collar, and back black.

Anas dispar. *Gmel. Syst. Nat.* 1. 535. *Lath. Ind. Orn.* 2. 866.

Anas stelleri. *Gmel. Syst. Nat.* 1. 518.

Western Duck. *Penn. Arct. Zool.* 2. 497. *pl.* 23. *Lath. Gen. Syn.* 6. 532. *Lath. Syn. Sup.* 275.

The sexes of this elegant species differ materially from each other: it is about seventeen inches in length, and the male has a black beak: the irides grey-brown: the top and sides of the head and neck, and hind part of the last, for half its length, white: on the forehead is a delicate pea-green band; and on the nape is a transverse one of the same colour, but darker; on the lower angle of which, on each side, is a round black spot, and an irregular shaped one at the hind corner of the eye: the chin, throat, and fore part of the neck black, communicating with a collar of the same, which surrounds the neck about the middle; from the hinder part of this, the black passes down over the back quite to the tail: the

breast and sides are pale rust-colour, deepening into chesnut in the middle, growing still darker as it passes on towards the vent, which is black: the wing-coverts are white: the prime quills dusky black; the secondaries are partly white, partly black, the colours being divided obliquely on each feather: the scapulars are long, and curve over the greater coverts; the inner web being very narrow, and, with the shaft, white; the outer web very broad, and black: the tail is pointed, and brown: the legs black. The female has all the plumage varied with brown and rust-colour: the quills are straight and dusky: some of the secondaries are tipped with white, which form a white speculum: and some of the coverts are also tipped with white, forming a large spot of that colour on the anterior part of the wing.

Found about the coasts of Kamtschatka and the north-western coasts of America; breeding among the most inaccessible rocks: they fly in flocks.

PINK-HEADED POCHARD.

(Fuligula caryophyllacea.)

Fu. *fusco-badia, rostro capite colloque supremo caryophyllaceis, speculo ferrugineo, pedibus cæruleis.*

Chocolate-brown Pochard with the beak, head, and upper part of the neck pink, the speculum rust-coloured, the legs blue.

Anas caryophyllacea. *Lath. Ind. Orn.* 2. 866.

Pink-headed Duck. *Lath. Syn. Sup.* i. 276. *pl.* cxix.

This inelegant bird is figured by Dr. Latham in the first Supplement to his Synopsis, and is thus described: "Size of the Black-billed Whistling Duck (Anas arborea): length twenty-one inches: beak two inches and a half in length, a trifle bent at the point: colour of that, the whole of the head, and half the neck a fine pink; and as far as that colour extends the feathers are short and downy: irides red: the lower part of the neck and the rest of the plumage a dusky deep chocolate-brown, except a kind of speculum, formed of three or four of the quills, which are a pale red, or rust-colour: some of the lower wing-coverts are curved downwards at the ends, as in the male Western Duck: the tail is two inches in length, and the wings reach near one-third thereon: the legs are blue-grey, and rather long. The female scarce differs from the male."

Inhabits various parts of India: is seldom seen in flocks, for the most part only two being found together: it is often kept tame.

BLACK AND WHITE POCHARD.

(Fuligula bicolor.)

Fu. *vertice rufo, nigro fasciato, collare albido, pectore ventreque rufis, humeris scapularibusque nigricantibus rufo-striatis, dorso, remigibus, rectricibusque nigris.*

Pochard with the crown red, banded with black, the collar whitish, the breast and belly red, the shoulders and scapulars dusky, striped with rufous, the back, quills, and tail-feathers black.

Anas bicolor. *Vieil. 2 Edit. du Nouv. Dict. d'Hist. Nat. t. 5. p. 136.*

Beak bluish: upper part of the head rufous, with a broad black fascia, which descends to the middle of the neck, where it is bounded by a white collar, which entirely surrounds the neck, and is broadest on the fore part; the rest of the neck is reddish-yellow: the feathers of the shoulders and scapulars are nearly black, finely striped with red: the tail-coverts are white, tinged with a straw-colour: the back, quills, and tail-feathers are black: the upper lesser wing-coverts slightly edged with dull red: the breast and the belly are red: the legs are lead-coloured.

Found in South America, towards the 26th degree of south latitude, in Paraguay, and about Buenos Ayres: it has a hoarse cry, resembling the syllables *bi-bi-bi*.

GMELIN'S POCHARD.

(Fuligula Gmelini.)

Fu. *nigra capite spadiceo, pectore lineis rubris transversis.*

Black Pochard with the head chesnut, the breast with red transverse lines.

Anas Gmelini. *Gmel. Syst. Nat.* 1. 531. *Lath. Ind. Orn.* 2. 876.

Gmelin's Duck. *Lath. Syn. Sup.* ii. 356.

LARGER than a Teal: at the corner of the gape a white spot: the prevailing colour of the plumage is black: the head chesnut: the breast crossed with reddish lines: the four first outer quills are black, within ash-colour; from the fifth to the tenth entirely cinereous; eleventh to nineteenth white; the twentieth, on the fore part half white, half dusky; at the hinder part ash-coloured; all of them tipped with black; from the twenty-first to the twenty-fifth, and also the wing-coverts, wholly black: the belly whitish, with dusky spots: the sides and vent snow-white: the tail black. Inhabits the Caspian Sea and the vicinity.

NEW ZEALAND POCHARD.

(Fuligula Novæ Zealandiæ.)

FU. *nigra viridi nitens subtus cinerascens, capite colloque postice cæruleo purpureoque nitente, fasciâ alarum albâ.*

Black Pochard glossed with green, beneath ash-coloured, with the head and neck behind shining with blue and purple, a white fascia on the wing.

Anas Novæ Zealandiæ. *Gmel. Syst. Nat.* 1. 541. *Lath. Ind. Orn.* 2. 870.

New Zealand Duck. *Lath. Gen. Syn.* 6. 543.

"LENGTH fifteen inches: beak two inches long, and somewhat stout; colour of a pale bluish-white; the nail at the tip black: irides the colour of gold: the head and neck are black; the hind head glossed with purple, changing in some lights to blue: upper

parts of the body and wings black, glossed with green: under parts of the body pale ash-colour: the quills are deep ash-colour; on the secondaries a bar of white: tail short, of a dirty green: legs pale ash-colour. Inhabits Dusky Bay, in New Zealand."—*Latham.*

OIDEMIA. SCOTER.

Generic Character.

Rostrum basi tumidum, magnum, validum, subcylindricum, elevatum, versus apicem depressum, obtusum; lateribus laminatis crassis instructis.

Nares ovales, elevatæ, ferè in medio rostri positæ.

Beak swollen at its base, large, strong, subcylindric, elevated, towards the tip depressed, obtuse; the edges furnished with coarse lamellæ.

Nostrils oval, elevated, placed nearly in the middle of the beak.

OIDEMIA. Fleming.
ANIA. Leach in Brit. Mus. Coll.

SCOTERS have a large, strong, and elevated beak, which is more or less swollen at its base; it is somewhat cylindric in form, with the part towards the tip depressed, the tip itself very obtuse, and furnished with a very small nail; its edges are broad and flat, and very coarsely pectinated: the nostrils are oval and projecting; they are situated towards the middle of the beak. All the known species are distinguished by a dull and fuliginous garb and inelegant form. They usually reside near the sea-coasts in preference to fresh waters.

GREAT-BLACK SCOTER.

BLACK SCOTER.

(Oidemia nigra.)

Oi. *corpore toto nigro* (mas.) : *vel fusco* (femina.)
Scoter with the body entirely black (*male*) : or brown (*female.*)
Anas nigra. *Linn. Syst. Nat.* 1. 196. *Gmel. Syst. Nat.* 1. 508. *Briss. Orn.* 6. 420. *pl.* 38. *f.* 2. male. *Lath. Ind. Orn.* 2. 848.
Anas nigra minor. *Raii, Syn.* 141. *A.*
La Macreuse. *Buff. Hist. Nat. Ois.* 9. 234. *pl.* 16. *Buff. Pl. Enl.* 978. *Cuv. Reg. Anim.* 1. 532.
Canard Macreuse. *Temm. man. d'Orn.* 554. *Id.* 2 *Edit.* ii. 856.
Scoter, or Black Diver. *Penn. Brit. Zool.* 2. 273. *Penn. Arct. Zool.* 2. 484. *Lath. Gen. Syn.* 6. 480. *Walc. Syn.* 1. *pl.* 59. *Lew. Brit. Birds,* 7. *pl.* 249. *Mont. Orn. Dict.* 2. *and Sup. Bew. Brit. Birds,* 2. 325. *Wils. Amer. Orn. v.* viii. *p.* 135. *pl.* xcii. *f.* 2.
Young.—Anas cinerascens. *Beckstein. Temm. man. d'Orn.* 555.

Length eighteen inches : on the base of the beak is a spherical protuberance : the beak is black, with the exception of the nostrils, which are orange, and a yellow longitudinal band on the globe of the beak : the irides are brown : the naked circle of the eyes is yellow : the entire plumage is of a deep velvety black : the tarsi and toes are ashy-brown ; the membranes black. The female is less, and has the top of the head, the occiput, and the nape deep brown, nearly black : the cheeks and throat are bright ash spotted with brown : the back, wings, and belly are

deep brown; all the feathers tipped with whitish-brown: the feathers of the breast are ashy-brown, all tipped with whitish-brown: the base of the beak is elevated, but is destitute of the globular protuberance of the male: the nostrils, and a spot towards the tip of the beak, are yellowish; the rest of the beak blackish: the naked circle of the eye is brown. The young males do not differ materially in plumage from the females: they have the beak black, except the nostrils and the under mandible, which are flesh-colour: the irides are ashy-brown: the space between the beak and the eye, the top of the head, the occiput, the nape, and the breast are deep brown: a space beneath the eyes, the sides, and fore part of the neck are pure white: all the rest of the plumage is dusky brown, or soot-colour: the tarsi and toes are yellow-ochre, tinged with greenish; the membranes are black. The young female has the brown on her plumage more ashy, and all the feathers have their edges palest: the white on the neck is tinged with greyish; and the breast and belly are rayed with greyish and brown.

The trachea of this species is gradually dilated to the middle of its length, where it is as big again as at its origin; it then becomes gradually narrower to the lower larynx, which is dilated into two gristly sacs, which are united in the middle by a transparent membrane: the branchiæ are dilated and much swollen; a character which also belongs to the female.

Native of the arctic regions, visiting the coasts of England, Holland, and France in plenty during the

autumn, and remaining till the spring, when they retire northward to fulfil the dictates of nature. They also occur in America, and are said to breed at Hudson's Bay, the female laying from six to ten white eggs, in a nest formed of grass and lined with down. Their food is shell-fish, in search of which they are perpetually diving: they swim apparently at ease amidst the roughest surf, but fly heavily along the surface, and to no great distance: on land they walk very awkwardly and erect. Their flesh is very indifferent, and its flavour partakes so much of fish, that it is allowed to be eaten in Roman Catholic countries on fast-days; and in France immense quantities are taken to supply the demand. Nets are spread horizontally over the beds of the shell-fish upon which they feed, supported at the height of two or three feet from the bottom: at the flowing of the tide the birds approach in great numbers, diving after their favourite food, and soon get entangled in the nets: twenty or thirty dozen have sometimes been taken in a single tide by this contrivance.

VELVET SCOTER.

(Oidemia fusca.)

Oi. *nigricans, palpebrâ inferiore speculoque alarum albis.*

Dusky Scoter with the lower eyelid and speculum of the wing white.

Anas fusca. *Linn. Syst. Nat.* 1. 196. *Gmel. Syst. Nat.* 1. 507. *Lath. Ind. Orn.* 2. 848.

Anas nigra major. *Briss. Orn.* 6. 423. *Raii, Syn.* 141. *A.*

Grande, ou Double Macreuse. *Buff. Hist. Nat. Ois.* 9. 242. *Buff. Pl. Enl.* 956. *Cuv. Reg. Anim.* 1. 533.

Canard Double Macreuse. *Temm. man. d'Orn.* 552. *Id.* 2 *Ed.* ii. 854.

Great Black Duck. *Willough.* 363. *pl.* 70.

Velvet Duck. *Penn. Brit. Zool.* 2. 272. *pl.* 196. *Penn. Arct. Zool.* 2. 482. *Lath. Gen. Syn.* 6. 482. *Lath. Syn. Sup.* 274. *Lath. Syn. Sup.* ii. 350. *Lath. iLnn. Trans.* iv. 119. *pl.* 15. *f.* 3—7. (trachea.) *Walc. Syn.* 1. *pl.* 58. *Lew. Brit. Birds,* 7. *pl.* 247. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 322. *Wils. Amer. Orn. v.* viii. *p.* 137. *pl.* xcii. *f.* 3. male.

Upwards of twenty-one inches in length: the base of the beak, which is slightly elevated, the nostrils, and the outer margin of the mandibles are black; the hook at its tip is yellowish-red; the rest of the beak yellow-orange: the irides are red: the entire plumage is velvety black, with a white lunule beneath the eyes, and a small white speculum on the wings: the tarsi and toes are red; the membranes black. The female has all the plumage of the upper parts of a dusky-brown, or soot-colour: the under parts are whitish-grey, rayed and spotted with blackish-brown: between the eyes and the beak, and also upon the

ears, is a white spot: the beak is blackish-ash: the irides are brown: the tarsi and toes are dull red. The young males during the first year resemble the old females, but are distinguished by the brighter red of the tarsi and toes, and by the white spots before and behind the eyes, which are much smaller.

The trachea of the male of this bird has a singular bony swelling, flat on one side, the size of a small walnut, situated about two-thirds of the length from the larynx: immediately under the larynx is another oblong bony cavity of nearly an inch in length; at the divarication the parts become bony, but not greatly enlarged.

Inhabit the arctic seas, where they rear their young, and continue during the summer months, but retire southward in winter, at which season they occur in greater or less profusion, according to the severity of the weather, on the more temperate coasts and seas of England, France, Holland, and America. They are also found at Kamtschatka, where they are said to breed, going far inland to lay: the eggs are eight or ten, and white: the males are said to depart and leave the females to remain with the young until they are able to fly. In the river Ochotska they are so numerous that a party of natives, consisting of fifty or more, go off in boats and drive the birds up the river before them; and when the tide ebbs, fall on them at once, and knock them on the head with clubs, killing such numbers, that each man has twenty or thirty for his share. These birds feed almost exclusively upon bivalve mollusca, in search of which they are perpetually diving.

URAL SCOTER.

(Oidemia leucocephala.)

Oi. *capite colloque albis, maculâ verticis collarique nigris.*
Scoter with the head and neck white, with a spot on the crown and collar on the neck black.
Anas leucocephala. *Gmel. Syst. Nat.* 1. 516. *Lath. Ind. Orn.* 2. 858.
Anas mersa. *Gmel. Syst. Nat.* 1. 520.
White-headed Duck. *Lath. Gen. Syn.* 6. 478.
Ural Duck. *Lath. Gen. Syn.* 6. 514.
Canard couronné. *Temm. man. d'Orn.* 556. *Id.* 2 *Ed.* ii. 859.

Seventeen inches in length: the base of the beak is much elevated and channelled in the middle; the beak itself is entirely blue: the irides are yellow: the top of the head is deep black: the cheeks, throat, and occiput are pure white: the under part of the neck and the nape are black: the breast, upper parts of the body, and the sides are beautiful deep red, varied with fine zigzag blackish-brown lines: the rump is purple-red: the tail is black: the under parts of the body are reddish-white: the legs are bluish-brown. The female has all the red parts shaded with ashy-brown: the zigzag lines are less distinct: the top of the head, the occiput, and the nape are deep brown; a band of which colour reaches from the angle of the beak to the orifices of the ears: the throat, cheeks, and fore part of the neck are yellowish-white: the rump is of a red-brown, striped with brown zigzag lines: the tail is shorter than in the male: the beak

and legs are reddish : the irides bright yellow : length rather less than that of the male. The young males resemble the females, but the colours on the head are more distinct.

This species inhabits the eastern countries of Europe : it is particularly abundant in Russia, Livonia, and Fionia ; and is found during its migrations in Austria and Hungary. It is said to construct its nest, on the seas and lakes of Russia, of rushes, and in such a manner as to enable it to float on the water. It feeds on aquatic mollusca and small fishes.

GREAT-BEAKED SCOTER.

(Oidemia perspicillata.)

OI. *nigra, vertice nuchâque albis, maculâ nigrâ rostri pone nares.*
Black Scoter with the crown and nape white, and a black spot on the beak behind the nostrils.
Anas perspicillata. *Linn. Syst. Nat.* 1. 201. *Gmel. Syst. Nat.* 1. 524. *Lath. Ind. Orn.* 2. 847.
Anas nigra major freti Hudsonis. *Briss. Orn.* 6. 425.
Macreuse à large bec, Marchand. *Buff. Hist. Nat. Ois.* 9. 244. *Buff. Pl. Enl.* 995.
Canard Marchand. *Temm. man. d'Orn.* 2 *Edit.* ii. 853.
Black Duck. *Edw. Glean. pl.* 155. *Penn. Arct. Zool.* 2. 483. *Lath. Gen. Syn.* 6. 479.
Black, or Surf Duck. *Wils. Amer. Orn.* viii. *p.* 49. *pl.* lxvii. *f.* 1. male.

LENGTH twenty-one inches : beak, with its elevated knob, yellowish, and on each side of it a black spot ;

the rest of the beak orange; its hook red, with its edges black: on the forehead is a patch of white, and on the back of the neck another: the rest of the plumage is of a dull sooty black: the legs are red; the membranes dusky. The female has two dull white spots on the cheeks, with the rest of her plumage of a dull sooty black: she is rather less than the male.

Native of North America, where it appears to be in plenty: it breeds on the shores of Hudson's Bay, making its nest with grass, and lining it with feathers: the female lays from four to six white eggs, which are hatched at the end of July: they are shy birds, and delight in diving about amongst the most impetuous surf. Wilson says that they are peculiar to America; but recent voyagers have noticed them among the Orcades and other high European latitudes.

" On dissection there appears a singular hard expansion at the commencement of the windpipe, and another much larger about three-quarters of an inch above where it separates into the two lobes of the lungs: this last is larger than a Spanish hazel nut, flat on one side and convex on the other."—*Wilson.*

BIZIURA. LOBEDUCK.

Generic Character.

Rostrum basi tumidum, validum, latum, apice incurvo; mandibula inferiore paleâ seu membranâ dependente instructâ.	*Beak* tumid at the base, strong, broad, its tip incurved; the lower mandible furnished with a wattle or dependent membrane.
Nares ovales, sub-basales.	*Nostrils* oval, sub-basal.
Cauda rotundata, rectricibus acutis.	*Tail* rounded, its feathers acute.

BIZIURA. Leach MSS.

THIS singular genus of Ducks is characterized by having a large excrescence or membranous wattle hanging downwards from the lower mandible of its beak, and by having the beak itself of a robust form and very broad. It is much allied to the Scoters, and also to the Eiders, but will not agree with either.

NEW HOLLAND LOBEDUCK.

(Biziura Novæ Hollandiæ.)

Bi. *corpore suprà nigro, longiditunaliter transversimque albido lineato, subtus albo, maculis nigris, rostro nigro, pedibus plumbeis.*

Lobeduck with the body above black, longitudinally and transversely striped with black and white, beneath white with black spots, the beak black, the legs lead-coloured.

Anas lobata. *Shaw, Nat. Misc.* viii. *pl.* 256.

Lobated Duck. *Lath. Gen. Syn. Sup.* ii. *p.* 349.

Inhabits New Holland: size of the Wild Duck: beak dusky black, its wattle of a very dark colour: the prevailing colour of the plumage dusky black, crossed with numerous transverse pale or whitish lines, intermixed with irregular markings and spots of the same: the chin, fore part of the neck, and belly are white, irregularly marked and spotted with dusky black: the quills and tail of the last colour, and the tail-feathers somewhat pointed: legs lead-colour.

SOMATERIA. EIDER.

Generic Character.

Rostrum basi tumidum, elevatum, in fronte recurrente, et pennarum prominentiâ triquetrâ diviso; ad apicem angustum, obtusum.

Nares parvæ in medio rostri positæ.

Beak swollen at its base, elevated, extending up the forehead, and divided by a triangular projection of feathers; towards the tip narrow and blunt.

Nostrils small, placed in the middle of the beak.

SOMATERIA. Leach, Fleming.
ANSER. Brisson.

THE construction of the beak of this genus is somewhat singular: this part is rather large in proportion, with its base much elevated and thrown backwards on the forehead, where it is divided by a longitudinal and triangular projection of feathers: its sides are also each furnished with a similar projection, which reaches as far as the nostrils, which are small: the tip of the beak is straight, semicylindric, and obtuse; the nail at the extremity rather large.

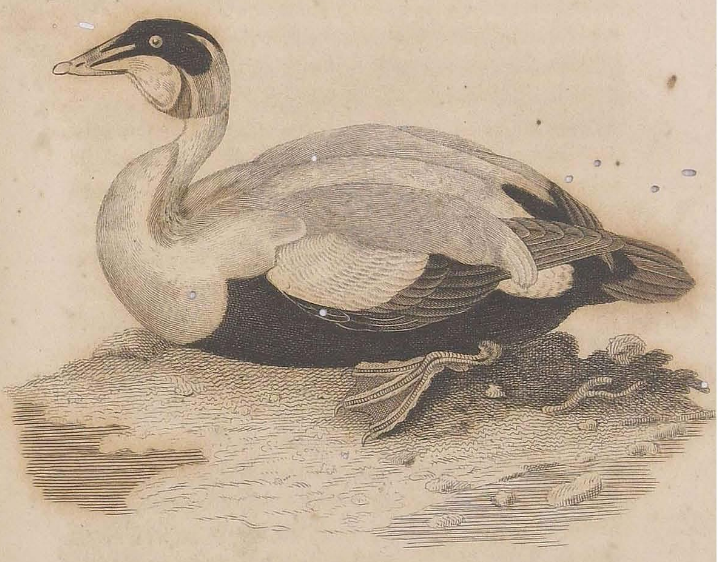
CUTHBERT EIDER.

(Somateria mollissima.)

So. *rostro basi lamellis duabus planis, pedibus virescente-cinereis.*
Eider with two flat lamellæ at the base of the beak, legs greenish-ash colour.

Anas mollissima. *Linn. Syst. Nat.* 1. 198. *Gmel. Syst. Nat.* 1. 514. *Lath. Ind. Orn.* 2. 845. *Sabine, Linn. Trans.* xii. 554.
Anser lanuginosus. *Briss. Orn.* 6. 294. *pl.* 29, 30.
Anas St. Cutberti. *Raii, Syn.* 141. *A.*
Oie à duvet, Eider. *Buff. Hist. Nat. Ois.* 9. 103. *pl.* 6. *Buff. Pl. Enl.* 209. male; 208. female.
Canaru Eider. *Temm. man. d'Orn.* 549. *Id.* 2 *Edit.* ii. 848. *Cuv. Reg. Anim.* 1. 534.
Great Black and White Duck. *Edw. Glean. pl.* 98.
Eider, or Cuthbert Duck. *Penn. Brit. Zool.* 2. 271. *pl.* 95. *Penn. Arct. Zool.* 2. 480. *Lath. Gen. Syn.* 6. 470. *Lath. Syn. Sup.* 274. *Lew. Brit. Birds,* 7. *pl.* 244. *Walc. Syn.* 1. *pl.* 66. *Mont. Orn. Dict.* 1. *and Sup.* *Bew. Brit. Birds,* 2. 314. *Wils. Amer. Orn.* viii. *p.* 122. 125. *pl.* xci. *f.* 2. male; *f.* 3. female. *Bing. Anim. Biog.* ii. *p.* 334.

This useful bird measures about two feet in length: its beak is dull green: irides brown: on each side and above the eyes is a very broad band of violet black, having its extremities united on the forehead: the cheeks, a band on the top of the head, and the occiput are greenish-white: the lower part of the neck, back, scapulars, and lesser wing-coverts are pure white: the breast is reddish-white, or flesh-colour: the belly, vent, and rump are deep black: the legs dull ashy-green. The old female is somewhat less than the male: she



Griffith

CUTHBERT EIDER.

has all the plumage reddish, transversely rayed with black: the wing-coverts are black in the middle, and edged with deep red: on the wing are generally two white bands: the belly and vent are brown, or deep ash, with black bands. The young males of the first year have the top of the head, the cheeks, and the upper parts of the neck adorned with very soft and downy feathers, of an ashy-brown hue, spotted with deep brown: at the root of the beak and above the eyes is a very broad whitish band, spotted with black: the lower part of the neck and the breast are transversely striped with black and white bands, and varied with ashy-red: the feathers on the upper parts are dusky, edged with brown: the under parts are ashy-brown, with all the feathers margined with whitish or clear brown: the tail is ashy-brown: the beak and legs are ashy-green, the latter sometimes reddish-brown: at the age of two years all the colours are more perfect: the white spaces on the neck, breast, the top of the back, and on the wings, are more distinct: the black becomes stronger, and without spots, on the greater part of the back: the lower parts are varied with spots and stripes of red, black, and white. The following year the plumage is still more regularly marked: the white becomes pure, and the bands on the sides of the head are commenced: the cheeks and the occiput are tinged with green: the back and several of the scapulary feathers are black: and several brown and striped feathers are mingled with the white ones of the neck. In the fourth year the plumage becomes perfect.

The trachea of the male is of an equal diameter through its entire length, and is composed of hard, entire, and cylindric rings, which are lined by a membrane: the lower larynx is dilated in front, and forms on the left side a hemispheric and slightly elevated bony protuberance: at the lower part of the glottis is a prominent triangular support.

This highly useful and valuable species is a native of the frozen regions of the north: it is extremely abundant in Iceland, Lapland, Greenland, and Spitzbergen, on the shores of Baffin's and Hudson's Bays, and, in fact, in all the frigid zone: it is also very numerous in the Hebridal Islands and the Orcades, but becomes rare as we advance to the south: in England it is very scarce, but few individuals having been killed therein; one, however, is recorded by Montagu as having been shot in the winter of 1807, on the southern coast of Devonshire; and Latham mentions that several were killed on the coast of Kent, near Sandwich, by the late Mr. Boys: it is said to breed in the Fern Islands on the coast of Northumberland, in the months of June and July: the female lays five or six pale greenish-olive eggs in a nest composed of marine plants, and comfortably lined with a beautiful down of most exquisite fineness, which is highly esteemed from its excessive lightness, elasticity, and useful qualities. The nest is usually formed on small islands, not far from the shore, and sometimes not far distant from human habitations. Occasionally two females, it is affirmed, will lay their eggs in the same nest, in which case

they always agree remarkably well. As long as the female is sitting, the male continues on watch near the shore; but as soon as the young are hatched, he leaves them; the mother, however, remains with them a considerable time afterwards, and is said to assist them out of the nest, almost as soon as they creep from the eggs, and proceeding to the shore, they crawl after her; and when she arrives to the water's edge she takes them on her back, and swims a few yards with them; when she dives, and the young are left floating on the surface, and are obliged to take care of themselves.

As before noticed, the down with which these birds line their nests is greatly prized, and various modes are adopted to secure the treasure: this substance (called *Eider* or *Edder down*) they pluck from their breasts in the breeding season. When the collectors come to the nest, they carefully remove the female, and take away the superfluous down and eggs, and after this they replace her. She then begins to lay afresh, and covers her eggs with new down, in which she is assisted by the male, in the event of her own stock being exhausted, which is not unfrequently the case; and even this is frequently taken away, when the birds proceed to furnish a fresh supply, both of eggs and down; but if the cruel robbery be repeated again, they immediately abandon the place. The best down and most eggs are obtained during the three first weeks of their laying; and it has generally been observed, that the birds lay the greatest number of eggs in rainy weather. One female, during the time of laying, generally yields half a pound of

down, which is reduced one-half after it is cleaned. This down is of such value, when in its purity, that it is sold in Lapland for two rixdollars a pound: it is extremely soft and warm, and so light and expansive, that a couple of handsful squeezed together are sufficient to fill a quilt five feet square. Pennant observes, that a quantity found in one nest more than filled the crown of a hat, yet weighed no more than three quarters of an ounce. The down taken from the nests is most valued, and termed live down; that plucked from the dead bird being less elastic, and but little esteemed. There are generally exported from Iceland, every year, by the Iceland Company at Copenhagen, 1500 or 2000 pounds weight of down, cleaned and uncleaned, exclusively of what is privately exported by foreigners. In the year 1750 this company sold so much in quantity of this article as produced 3747 rixdollars, besides what was sent directly to Gluckstadt.

Eiders associate together in flocks, generally in deep waters, diving for shell-fish, which constitute their principal food: they frequently retire to the rocky shores to rest, particularly on the appearance of an approaching storm. The Greenlanders kill them with darts, pursuing them in their little boats, watching their course by the air bubbles when they dive, and always striking at them when they rise to the surface wearied. Their flesh is valued as food, and their skins are made into warm and comfortable under garments.

Several attempts have been made to domesticate these birds, but hitherto without success: they are said to live to a great age.

KING EIDER.

(Somateria spectabilis.)

So. *rostro basi paleis duabis elevatis, pedibus rubris.*

Eider with two elevated wattles at the base of the beak, the legs red.

Anas spectabilis. *Linn. Syst. Nat.* 1. 195. *Gmel. Syst. Nat.* 1. 907. *Lath. Ind. Orn.* 2. 845. *Sabine. Linn. Trans.* xii. *p.* 553.

Anas freti Hudsonis. *Briss. Orn.* 6. 365.

Le Canard à tête grise. *Buff. Hist. Nat. Ois.* 9. 253. *Temm. man. d'Orn. 2 Edit.* ii. 851.

Grey-headed Duck. *Edw. Glean. pl.* 154.

King Duck. *Penn. Arct. Zool.* 2. 481. *Lath. Gen. Syn.* 6. 473. *Lew. Brit. Birds,* 7. *pl.* 245. *Mont. Orn. Dict.* 1. *and App. Lath. Linn. Trans. V. p.* 27.

NOT much unlike the foregoing: its length two feet: its beak, wattles, and legs deep vermilion: a very straight band of velvety black surrounds the base of the upper mandible of the beak, which is divided on the superior parts, and passes between its two fleshy wattles, or crests: there is a similar double band which becomes spear-shaped on the throat: the top of the head, the occiput, and the nape are of a fine bluish-grey: the cheeks are shining sea-green: the neck, upper part of the back, wing-coverts, and two large spaces on each side of the rump are pure white: the breast is reddish-white: the scapulars, lower part of the back, wings, tail, and all the under parts of the body are deep black. The female is less: the feathered ridge on the tip of the beak is larger: the entire

plumage brown, with the middle of each feather dusky: six of the lesser quills are tipped with white, forming a line of that colour on the wings; the rest of the quills and tail brown. The young do not attain their full plumage for some years. The trachea of this species very closely resembles that of the preceding.

Inhabits the frozen ocean of the north: is common in the Orcades and other parts of Scotland, and in profusion on the coasts of Greenland and Spitzbergen: it is also plentiful about Hudson's Bay, where it breeds on the sides of pools and rivers: the nest is made of sticks and moss, lined with down plucked from its own body. The eggs are five or six in number, and whitish: the down is as much prized as that of the former bird, and the skins are sown together by the natives of Siberia and Kamtschatka, and used for winter garments: its flesh is excellent, and the gibbous part of the beak is reckoned a delicacy.

COLYMBIDÆ.

THE second family of the *Natatores* embraces the *Colymbi* of Linné, which are characterised by a smooth, straight, compressed, and acute beak, whose edges are simple, or slightly denticulated, but without laminated appendages: the nostrils are linear, and partially closed by a membrane: the wings are very

short: the legs are placed very far back on the abdomen: the tarsi are much compressed: the feet are either entirely webbed, or the margins only of the toes are furnished with lobes: the toes are three in number in some of the genera, and four in the others: the tail is very short.

This family may be readily divided into two sections, from the structure of the feet; the first having them entirely palmated, and the toes terminated by pointed claws: in this section are included the genera *Colymbus* and *Uria*, the former of which only possesses a hinder toe, which is furnished with a lobe. The second section comprises the genera *Podiceps* and *Podoa*, and the feet are constructed similarly to those of the Coots, the toes being united at the base only by a web, and ornamented on their edges with lobes; the Podoæ having the hinder toe simple, and the Podicepes lobated. The backward position of the legs of these birds renders their walk very inelegant, and obliges them, when on land, to stand nearly upright; but this is amply compensated by the facilities that structure renders them while swimming or diving, at both of which they are very expert. The birds of the second division fly very badly, from the brevity of their wings, but the rest fly well though rarely.

COLYMBUS. DIVER.

Generic Character.

Rostrum capite longior, rectum, validum, ferè cylindricum, compressum, acutiore; mandibula superiore inferiore longiore.

Nares basales, laterales, concavæ, membranâ semiclausæ.

Pedes tetradactyli, mediocres, *digiti* antici longissimi toto palmati; *pollex* brevis pinnatus; *ungues* depressi.

Cauda brevis.

Beak longer than the head, straight, strong, nearly cylindrical, compressed, acute; the upper mandible longer than the lower.

Nostrils basal, lateral, concave, half-closed by a membrane.

Legs four-toed, mediocral, the *anterior toes* very long and wholly webbed; the *hinder toe* short and webbed; the *claws* depressed.

Tail short.

COLYMBUS. Ray, Linn., Gmel., Lath., Cuv., Temm.
MERGUS. Briss.
EUDYTES. Illig.

At once distinguished from the following genus by the presence of the hinder toe; and from the Grebes and Podoæ by the palmated feet. All the species inhabit the northern regions, and live almost continually upon the water, diving and swimming

NORTHERN DIVER _ *young*.

about with astonishing dexterity, in which they are greatly assisted by their wings: they chiefly affect fresh water: they usually lay two eggs: and their principal nourishment consists of small fishes, to which they are very destructive: they also devour aquatic insects and vegetables.

NORTHERN DIVER.

(Colymbus glacialis.)

Co. *capite colloque nigro-violaceo, fasciâ gulæ cervicisque albâ interruptâ; aut, corpore supra nigricante albo undulato subtus toto albo.*

Diver with the head and neck deep violet, with an interrupted white fascia on the throat and cervix; or, with the body above dusky, undulated with white, beneath entirely white.

Colymbus glacialis. *Linn. Syst. Nat.* 1. 221. *Gmel. Syst. Nat.* 1. 588. *Lath. Ind. Orn.* 2. 799. *Sabine, Frank. Journ. App.* 703.

Colymbus torquatus. *Brunn. p.* 41. *no.* 134.

Mergus major nævius. *Briss. Orn.* 6. 120. *pl.* 11. *f.* 2.

Colymbus maximus caudatus. *Raii, Syn.* 125. *A.*

L'Imbrim. *Buff. Ois.* 8. 258. *pl.* 22. *Buff. Pl. Enl.* 952. *Temm. man. d'Orn.* 597. *Id.* 2 *Edit.* ii. 910.

Le Grand Plongeon. *Cuv. Reg. Anim.* 1. 508.

Greatest Speckled Diver, or Loon. *Alb. Birds,* 3. *pl.* 93.

Northern Diver. *Penn. Brit. Zool.* 2. 327. *pl.* 93. *Penn. Arct. Zool.* 2. 439. *Lath. Gen. Syn.* 6. 337. *Lew. Brit. Birds,* 6. *pl.* 226. *Walc. Syn.* 1. *pl.* 90. *Don. Brit. Birds,* 3. *pl.* 58. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 183. *Wils. Amer. Orn* ix. *p.* 84. *pl.* lxxiv. *f.* 3.

YOUNG.—Colymbus Immer. *Linn. Syst. Nat.* 1. 222. *Gmel. Syst. Nat.* 1. 588. *Lath. Ind. Orn.* 2. 800.
Mergus major. *Briss. Orn.* 6. 105. *p.* 10. *f.* 1.
Colymbus maximus Gesneri. *Raii, Syn.* 126.
Le Grand Plongeon. *Buff. Hist. Nat. Ois.* 8. 251.
Imber Diver. *Penn. Brit. Zool.* 2. 238. *pl.* 84. *Penn. Arct. Zool.* 2. 440. *Lath. Gen. Syn.* 6. 340. *Walc. Syn.* 1. *pl.* 99. *Don. Brit. Birds*, 5. *pl.* 99. *Lew. Brit. Birds*, 6. *pl.* 227. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds*, 2. 185.

LENGTH of the mature bird about thirty-two inches: its beak is black, with its tip ash-coloured: irides brown: the head, throat, and neck are greenish-black, glossed with green and bluish: beneath the throat is a small transverse band, which is rayed with white and black: on the hinder part of the neck is a broad collar longitudinally rayed with black and white: the back, wings, sides, and rump are deep black; with each feather of the back and scapulars marked at the tip with two square white spots: the wing-coverts, sides, and rump are sprinkled with small white spots: the breast and under parts are pure white: the legs are dusky brown externally and whitish internally. The young differ considerably from the old: they have the upper mandible of the beak of a greyish-ash, and the under whitish: the irides brown: the head, occiput, and all the hinder part of the neck, of an ashy-brown; with small grey and white spots on their cheeks: the throat, fore part of the neck, and the rest of the under parts of a pure white: the feathers of the back, the wings, rump, and sides are deep brown in the middle, edged and tipped with bluish-ash: the legs are deep brown externally and whitish internally. After the first year they possess

a kind of collar on the fore part of the neck of a dusky-brown colour, and the feathers on the back become blackish, with the rudiments of white spots. In the second year the collar becomes more perfect, and this part, with the head and neck, is varied with blackish-green and brown feathers: the spots on the back and wings become more numerous; and the band beneath the throat, and that on the nape, are marked longitudinally with brown and white. In the third year the plumage becomes perfect.

The Northern Diver appears to inhabit the arctic regions of Europe, Asia, and America, and is very abundant in the Hebridal Islands, Norway, Sweden, and Russia: it also occurs during its migrations in the more northern climes of Germany, France, and Switzerland; though but rarely in England. It seldom quits the sea or retires inland, except during the period of incubation, when it repairs to the borders of fresh water lakes, and the female deposits two large eggs of a pale clear yellowish-colour, marked with very large and small spots of ashy-purple. It feeds on small fishes, especially herrings, their fry, insects, and marine vegetables.

BLACK-THROATED DIVER.

(Colymbus arcticus.)

Co. *capite cano, collo subtus airo-violaceo, fasciâ albâ interruptâ.*
Diver with the head hoary, the neck beneath dark violet, with an interrupted white bar.
Colymbus arcticus. *Linn. Syst. Nat.* 1. 221. *Gmel. Syst. Nat.* 1. 587. *Raii, Syn.* 125. *Lath. Ind. Orn.* 2. 800.
Mergus gutture nigro. *Briss. Orn.* 6. 115.
Le Lumme, ou petit Plongeon de la mer du nord. *Buff. Ois.* 8. 262. *Temm. man. d'Orn.* 599. *Id.* 2 *Edit.* ii. 913.
Black-throated Diver. *Edw. Glean. pl.* 146. *Penn. Brit. Zool.* 2. 241. *pl.* 85. *f.* 2. *Penn. Arct. Zool.* 2. 444. *Lath. Gen. Syn.* 6. 343. *Lew. Brit. Birds,* 6. *pl.* 229. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 195.
Young.—Le grand Plongeon. *Buff. Pl. Enl.* 914.
Lesser Imber. *Bew. Brit. Birds,* 2. 187.

Length about twenty-eight inches: beak dusky: irides brown: the head and neck are ashy-brown, deepest on the forehead: the throat and fore part of the neck are black glossed with violet: beneath the throat is a straight band, longitudinally rayed with white and black: near the orifice of the ears, and on the sides of the neck, extends a broad band, which is longitudinally rayed with white and black: the lower part of the neck is rayed with black: the breast and the rest of the under parts are pure white: the back, rump, and sides are deep unspotted black: on the edges of the upper part of the back is a longitudinal space, in which the feathers are tipped with white: the scapulars are transversely striped with about a dozen

pure white bands: the wing-coverts are black, slightly sprinkled with white: the legs are externally brown, and internally, as well as the membranes, whitish. The young greatly resemble those of the preceding species, but are considerably smaller: they have the head and the nape of a clear ash-colour: the throat and fore part of the neck white, sometimes varied with violet-black feathers: the longitudinal band and stripe on the sides of the neck, those on the lower part of the neck, and several black feathers on the back, rump, and sides, are apparent. At the age of two years the ash-colour on the head and the nape becomes deeper, and has a blackish tinge on the fore-head: the violet-black on the throat and fore part of the neck appears, but it is always spotted with white: the longitudinal bands are portrayed: the feathers on the edges of the upper parts of the back, the scapulars, and the wing-coverts are barred and spotted with white: the upper mandible of the beak becomes dusky, but its base and under mandible are still ash-coloured. In the third year the plumage is perfect.

This bird is equally common in the northern arctic regions with the preceding, and appears, during its autumnal and winter migrations, in England, Germany, and Holland: it is rare in the interior of France, but very common on the Swiss lakes. It breeds among the plants on the borders of lakes and other large collections of water; the female laying two brown eggs, sprinkled with distinct black spots: its food consists, as is usual in this genus, of fish, frogs, insects, and aquatic plants.

In some countries the skin is used for various sorts of clothing, and other purposes, being very warm and exceedingly tough.

RED-THROATED DIVER.

(Colymbus septentrionalis.)

Co. *supra fuscus subtus albus, faciebus lateribusque colli cinereis, collo antice rufo; aut, corpore supra fusco albo maculato subtus albo.*

Diver above brown, beneath white, the face and sides of the neck ash-coloured, the neck beneath rufous; or, the body above brown, spotted with white, beneath white.

Colymbus septentrionalis. *Linn. Syst. Nat.* 1. 220. *Gmel. Syst. Nat.* 1. 586. *Lath. Ind. Orn.* 2. 801. *Sabine, Frank. Journ. App.* 703. *Linn. Trans.* xii. *p.* 542.

Colymbus lumme. *Briss. Orn. no.* 132.

Mergus gutture rubro. *Briss. Orn.* 6. 111. *pl.* 11. *f.* 1.

Le Plongeon à gorge rouge. *Buff. Hist. Nat. Ois.* 8. 264. *Buff. Pl. Enl.* 308.

Plongeon Cat-marin. *Temm. man. d'Orn.* 600. *Id.* 2 *Edit.* ii. 916.

Le petit Plongeon. *Cuv. Reg. Anim.* 1. 509.

Red-throated Diver. *Edw. Glean. pl.* 97. *Penn. Brit. Zool.* 2. 240. *pl.* 85. *f.* 1. *Penn. Arct. Zool.* 2. 443. *Lath. Gen. Syn.* 6. 344. *Walc. Syn.* 1. *pl.* 100. *Lew. Brit. Birds,* 6. *pl.* 230. *Don. Brit. Birds,* 4. *pl.* 78. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 193.

Young.—Colymbus stellatus. *Gmel. Syst. Nat.* 1. 587. *Lath. Ind. Orn.* 2. 800.

Mergus minor. *Briss. Orn.* 6. 108. *pl.* 10. *f.* 2.

Le Plongeon Cat-marin. *Buff. Hist. Nat. Ois* 8. 256.

Le petit Plongeon. *Buff. Hist. Nat. Ois.* 8. 254. *pl.* 21. *Buff. Pl. Enl.* 992.

Speckled Diver, or Loon. *Penn. Brit. Zool.* 2. 239. *Penn. Arct. Zool.* 2. 441. *Lath. Gen. Syn.* 6. 341. *Walc. Syn.* 1. *pl.* 101. *Lew. Brit. Birds,* 6. *pl.* 228. *Mont. Orn. Dict.* 1. *and Sup.* *Bew. Brit. Birds,* 2. 189. *and* 191.

VARIETY.—Colymbus striatus. *Gmel. Syst. Nat.* 1. 586. *Lath. Ind. Orn.* 2. 802.

Colymbus borealis. *Briss. Orn.* 39. *no.* 131. *Lath. Ind. Orn.* 2. 801.

Striped Diver. *Penn. Arct. Zool.* 2. 442. *Lath. Gen. Syn.* 6. 345.

ABOUT two feet in length: beak black: irides orange-brown: the sides of the head, and of the neck, and the throat, are velvety ash or mouse colour: the top of the head is spotted with black: the occiput, the hinder and lower part of the neck, are longitudinally rayed with black and white: on the fore part of the neck is a long stripe of very bright chesnut-red: the breast and under parts of the plumage are pure white: the sides, the back, and the rest of the upper parts of the plumage are blackish-brown in the very old birds, but in those of the age of three or four years they are slightly sprinkled with small white spots: the legs are outwardly greenish-black, and inwardly, with the membranes, of a greenish-white. The young on leaving the nest are dusky-brown above and whitish beneath. After their first moult, the space between the eye and the beak, the sides of the neck, the throat, and the rest of the under parts of the plumage are of a perfect white: the top of the head and the nape are dusky ash,

slightly bordered with white: the back, scapulars, and rump are dusky-brown, sprinkled with many small white spots, disposed on the edges of the webs: the wing-coverts are bordered towards their tips with white: the beak is ashy-white; deepest above: the irides are brown: the legs are externally brown; internally, and part of the membranes, ashy-white. In the second year the throat and sides of the neck become coloured as in the old birds: the nape is also rayed the same, though occasionally, at this age, all the fore part of the neck is clothed with white feathers, amongst which are some of a chesnut-red colour: the white spots on the upper parts of the plumage become more distinct, smaller, and are often tinged with yellowish. After the second moult all the fore part of the neck is of a chesnut-red, which is often sprinkled with white: the spots on the upper parts of the plumage disappear as the bird attains maturity.

Like the two former species, this frequents the arctic regions of Europe, Asia, and America: it is very abundant in the autumn and throughout the winter in England, Holland, and France; and the young abound in the seas of the interior of Holland, in Germany, Switzerland, and Italy. The female makes her nest, which is composed of moss and herbage, with a little of her own down, on the very edge of the shore: she lays two eggs, of an equal thickness at each end, and of a brownish-yellow colour, marked with a few black spots. These birds live in pairs: run swiftly upon the water, but are very awkward on land: they rise from the ground

with difficulty, but when once on the wing, rise to a great height, and utter at intervals a disagreeable croaking or loud howling cry. They are frequently taken in the fishermen's nets, in their endeavours to devour the fish that are entangled therein : they feed on small fish, whiting particularly, shrimps, frogs, insects, and aquatic plants.

URIA. GUILLEMOT.

Generic Character.

Rostrum basi plumis tomentosis obductum, rectum, elongatum, supra convexum, utrinque compressum, subulatum, acutum; mandibulâ superiore versus apicem lateratim emarginatâ.	*Beak* clothed at its base with downy feathers, straight, elongated, above convex, compressed on each side, subulated, acute; the upper mandible towards the tip laterally emarginated.
Nares lineares, plumis semitectæ.	*Nostrils* linear, half-covered with feathers.
Pedes tridactyli, palmati.	*Legs* three-toed, palmated.

URIA. Briss., Lath., Brunn.
COLYMBUS. Linn., Gmel.
LOMVIA. Ray.
GRYLLE. Leach.

THE Guillemots have a beak greatly resembling that of the Diver; but this genus is well separated from them by the absence of the hinder toe; and also by the habits of the individuals comprised in it; the Divers usually frequenting the fresh waters, while these prefer the sea or its coasts; and very seldom

appear upon land, unless it be for the purpose of nidification and incubation, which they do in large flocks, each female laying a single egg only.

FRANKS'S GUILLEMOT.

(Uria Francsii.)

UR. *corpore fuliginoso, pectore abdomineque niveo, remigibus, secundariis apice albis, rostro capite breviore; mandibulâ superiore triplo longiore quam lata.*

Guillemot with the body fuliginous, the breast and abdomen snowy, the secondary quills white at the tip, the beak shorter than the head, the upper mandible three times longer than broad.

Uria Francsii. *Leach, Linn. Trans.* xii. 588.
Uria Troile. *Brun. Orn. Boreal. no.* 109.
Uria Brunnichii. *Sabine, Linn. Trans.* xii. 539.
Guillemot à gros bec. *Temm. man. d'Orn.* 2 *Edit.* ii. 924.

"LENGTH seventeen inches: inside of the throat yellow: irides dark: throat and neck sooty brown: head black: hind head, hind neck, back, and wings dark sooty brown; the wings being lightest, and the secondaries tipt with white: the feathers of the head and neck have a peculiar smoothness and softness: from the eye to the hind head is a line occasioned by a division of the feathers: belly and all beneath pure white, running up to a point in the neck: the feathers are very thick, and on being removed, a dark down appears between them and the skin: legs mar-

bled brown and yellowish: claws black: the margins of the upper mandible of the beak yellow.

This interesting species was procured during Captain Ross's expedition towards the discovery of the north-west passage: it is very abundant in Davis's Straits, Baffin's Bay, the coasts of Greenland and of Spitzbergen: it has been confounded with the following species. Brunninck was the first who described it, under the name of Uria Troile, giving to that bird the appellation of U. lomvia; it has consequently been necessary to apply a new name to the present species. I have therefore adopted that given by my friend Dr. Leach, as his name was first published at a meeting of the Linnean Society, and entered upon the minutes of that body.

FOOLISH GUILLEMOT.

(Uria Troile.)

UR. *corpore fusco, pectore abdomineque niveo, remigibus secundariis apice albis, rostro longitudine capitis; mandibulâ superiore quadruplo longiore quam lata.*

Guillemot with the body brown, the breast and abdomen snow-white, the secondary quills white at the tip, the beak the length of the head, and the upper mandible four times longer than broad.

Uria Troile. *Lath. Ind. Orn.* 2. 796.

Colymbus Troile. *Linn. Syst. Nat.* 1. 220. *Gmel. Syst. Nat.* 1. 585.

Uria. *Briss. Orn.* 6. 70. *pl.* 6. *f.* 1.

I. FOOLISH GUILLEMOT.

2. FRANKS'S GUILLEMOT.

Lomvia Hoieri. *Raii, Syn.* 120. *A.*
Uria lomvia. *Brun. Orn. Boreal. no.* 108.
Le Guillemot. *Buff. Hist. Nat. Ois.* 9. 350. *pl.* 25. *Buff. Pl. Enl.* 903.
Grand Guillemot. *Cuv. Reg. Anim.* 1. 509.
Guillemot à capuchon. *Temm. man. d'Orn.* 606.
Foolish Guillemot. *Albin. Brit. Birds,* 1. *pl.* 84. *Edw. Glean. pl.* 359. *f.* 1. *Penn. Brit. Zool.* 2. 234. *Penn. Arct. Zool.* 2. 436. *Lath. Gen. Syn.* 6. 329. *Lath. Syn. Sup.* 265. *Lew. Brit. Birds,* 6. *pl.* 220. *Walc. Syn.* 1. *pl.* 96. *Don. Brit. Birds,* 2. *pl.* 28. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. *pl.* 175. *Atk. Comp.*

THIS species is in length seventeen inches: beak black, three inches long, straight, sharp-pointed: inside of the mouth yellow: irides dusky: the base of the beak is covered with soft feathers, which, with the head, neck, back, wings, and tail, are of a deep mouse-coloured brown: the tips of the lesser quill-feathers white: the whole under side of the body pure white: on the sides under the wings a few dusky lines: from the eye to the hind head is a singular line occasioned by a division of the feathers: legs dusky.

Guillemots inhabit various parts of the northern hemisphere, visiting the more temperate regions on the approach of winter, and remaining on the coasts of Britain and Norway until they have reared their young. The female lays only one egg, of a greenish-yellow colour, blotched and marbled with dusky, and so variable that scarcely two are found alike: during the period of incubation she is regularly fed with sprats and other small fish by the male. These birds are found in the utmost profusion on some of our

coasts, and it is not uncommon to see hundreds sitting upon their eggs on the ledge of a rock, in a line, nearly touching each other: they appear to be a stupid and inactive race, and will suffer themselves to be repeatedly shot at without removing from the spot, notwithstanding their companions drop at every fire: they will often allow themselves to be captured by hand.

Much contrariety of opinion prevails among naturalists respecting the distinction of this species from the following; I have however judged it best to separate them, as the observations of Montagu, and a transient examination of the specimens preserved in the British Museum, appear to justify that proceeding.

LESSER GUILLEMOT.

(Uria minor.)

Ur. *nigra, subtus genis fasciâque alarum alba.*

Black Guillemot beneath, and with the cheeks and a band on the wing white.

Colymbus minor. *Gmel. Syst. Nat.* 1. 585.

Uria Troile (female). *Lath. Ind. Orn.* 2. 797.

Uria Swarbag. *Brun. Orn. Boreal. no.* 110.

Lesser Guillemot. *Penn. Brit. Zool.* 2. 235. *pl.* 83. *Penn. Arct. Zool. Sup. p.* 69. *Lath. Gen. Syn.* 6. 332. *Walc. Syn. pl.* 97. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 177.

Guillemot à capuchon (jeune). *Temm. man. d'Orn.* 607.

The lesser Guillemot is in length sixteen inches: its beak is black: irides dusky: the upper part of

LESSER GUILLEMOT.

var.

the head, hind part of the neck, back, wings, and tail are black: from the eye a dusky streak arises, pointing backwards: the tips of the secondary quill-feathers are slightly marked with white: the cheeks, throat, and all the under parts white: on the sides and on the thighs a few dusky streaks: legs black.

This species inhabits the same regions as the preceding, and is by many ornithologists reputed to be the young of that bird; but Montagu asserts that it is a totally distinct species, and in support of his opinion gives the following reasons in the Supplement to his Ornithological Dictionary, which I shall quote at length, in order to prevent unnecessary repetition hereafter, as they equally apply, not only to the present and preceding bird, but to the Common and Lesser Razor-bills (or *Black-billed Auk* of authors), which he also separates.

Montagu observes, that "this species and the Black-billed Auk (Utamania pica) are found in vast abundance in winter, in the bays on the coast of Scotland, extending even to the Orkney and Zetland islands, but particularly in the Firth of Forth; and at the same time being so sparingly scattered over the southern parts of the kingdom, evinces that they are properly natives of the more northern regions, and retire only from the icy seas to such parts as may afford them subsistence. Thus they are contented with a boreal station, even in the colder months, and never seek a southern region, but mostly continue on our northern shores, where they are never impeded by ice from diving after their favourite prey, the sprat, which is there found in abundance throughout the winter,

The Foolish Guillemot, and the Razor-bill, on the contrary, are indigenous to this country, breed on most of our higher cliffs, and after performing the great dictates of nature, invariably leave our shores, and retreat to some more southern climate; nor is one to be found among the Lesser Guillemots and Black-billed Auks, in the winter season, so far north as Scotland, an accidental maimed bird excepted, and only one or two instances have occurred in which the Foolish Guillemot was found in the most southern part of the island (Devonshire) at that season. Thus the Lesser Guillemot and Black-billed Auk in part supply the places of the Foolish Guillemot and Razor-bill during the winter, and the reverse is the consequence of our nearer approach to the sun." He adds, that "it is contrary to every principle of reasoning upon natural causes to suppose that when the two last retire in the autumn from the southern parts of England they should go to the north of Scotland, and be converted by a change of plumage into the two former. The supposition that any bird should migrate northward to pass the winter, is in direct violation of the actual cause of the propensity to migrate. Every species of animal that shifts its quarters with the seasons breeds in the higher and passes the winter in the lower latitudes. Those who may have formed an opinion that the two first are the young of the others, should be asked to produce an instance of so unnatural a case as that of all the young of any species remaining behind to winter in a northern country, while the old birds seek a more southern climate. Besides, those who favour such an opinion

must go further, for they must also believe that when the old birds leave England in the autumn, to winter along the shores of the southern parts of the continent, the young birds take a contrary direction, and accumulate in the north of Scotland, as far as Zetland; in which parts they are infinitely more abundant than any where farther south."—"Myriads of Foolish Guillemots and Razor-bills resort to the lofty promontories of the southern as well as the northern shores of Great Britain; and when these retire, not a Lesser Guillemot or a Black-billed Auk is to be seen in their place for a month or six weeks, and then a few stragglers only, for they are never common in the south of England."

This species is soon reconciled to confinement. An individual captured alive on the coast of Devonshire devoured flesh as well as fish, and had become quite docile in the short space of ten days, when it died from an injury received in its capture, approaching to the side of the pond, in which it was confined, to be fed.

MARBLED GUILLEMOT.

(Uria marmorata.)

UR. *supra castaneo fuscoque undulata subtus fusco alboque nebulosa, rostro nigro, pedibus fulvis.*

Guillemot varied above with chesnut and brown, beneath clouded with brown and white, with the beak black, the legs fulvous.

Uria marmorata. *Lath. Ind. Orn.* 6. 336.

Marbled Guillemot. *Penn. Arct. Zool.* ii. *p.* 438. *pl.* 22. *Lath. Gen. Syn.* 6. 336. *pl.* 96.

Latham, who has given a figure of this species, says it is "larger than the Little Auk (Mergulus melanoleucos), and is ten inches in length: the beak is compressed a little on the sides, rather slender, and one inch in length: crown of the head dusky: upper part of the body transversely barred with tawny, chesnut, and blackish-brown, as far as the tail, which is short and black: the wing-coverts dusky, some of the larger edged with white: quills black: the chin and throat are dusky, mixed with irregular blotches of white: sides of the neck plain dusky: breast, belly, and vent irregularly barred and undulated with dusky and white, changing to the last at the vent: legs and toes of a pale orange: webs and claws black. Male and female much alike."

Inhabits various parts of the north-western coast of America and the north-eastern portion of Asia: common in the islands of Beering's Straits.

BLACK GUILLEMOT.

(Uria scapularis.)

Ur. *corpore atro, tectricibus alarum albis.*
Guillemot with the body dark-coloured, and the wing-coverts white.
Colymbus Grylle. *Linn. Syst. Nat.* 1. 220. *Gmel. Syst. Nat.* 1. 584.
Uria Grylle. *Lath. Ind. Orn.* 2. 797.
Uria minor nigra, vel Columba Groenlandica. *Briss. Orn.* 6. 76.
Le petit Guillemot noir. *Buff. Ois.* 9. 354. *Cuv. Reg. Anim.* 510.
Guillemot à miroir blanc. *Temm. man. d'Orn.* 608.

WHITE-WINGED GUILLEMOT.

Summer Plumage.

Greenland Dove, or Sea Turtle. *Alb. Birds,* 2. *pl.* 80.
Black Guillemot, or Scraber. *Penn. Brit. Zool.* 2. 236. *Penn. Arct. Zool.* 2. 437. *Lath. Gen. Syn.* 6. 332. *Lath. Syn. Sup.* ii. 265. *Lewin. Brit. Birds,* 6. *pl.* 221. *Walc. Syn.* 1. *pl.* 95. *Mont. Orn. Dict.* 1. *and Sup.* *Bew. Brit. Birds,* 2. 179.
Grylle scapularis. *Leach in Brit. Mus. Collection.*
YOUNG.—Uria minor striata. *Briss. Orn.* 6. 78.
Uria Balthica. *Brun. Orn. Boreal. no.* 115, 116.
Uria grylloides. *Brun. Orn. Boreal. no.* 114.
Spotted Greenland Dove. *Edw. Glean. pl.* 50.
Spotted Guillemot. *Penn. Brit. Zool.* 2. *pl.* 83. *Lath. Gen. Syn.* 6. 334. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 181.
VARIETY.—Cephus lacteolus. *Pall. Spicil.* 5. 33.
Colymbus lacteolus. *Gmel. Syst. Nat.* 1. 583.
Uria lacteola. *Lath. Ind. Orn.* 2. 798.
White Guillemot. *Lath. Gen. Syn.* 6. 335.

ABOUT fourteen inches in length: the beak is black: the inside of the mouth bright red: the top of the head, the nape, all the upper parts of the plumage, with the exception of the middle of the wings, are very deep black: the greater and middle wing-coverts are white: the cheeks and all the under parts, from the beak to the tail, are pure white: the legs and feet are bright red: the irides brown. The above is the winter plumage: the following is that of the summer: the male has the beak black, its inside and legs bright red; and all the plumage deep black, with the exception of the greater and middle wing-coverts, which are pure white. The female is rather less than the male: the plumage is of a lighter black, and the white on the wing-coverts is more dingy than in the male, and less extended: during the period of moulting both sexes are varied more or less on the under parts with white feathers. The young of the

year have the throat, the breast, and all the under parts of the plumage pure white: the top of the head, the nape, the lower part of the neck, and sides of the breast dusky, spotted with grey and white: the back and rump are dull black; several feathers on the latter having their tips ashy-white: the wings are black, except the greater and middle coverts, which are white, spotted with ashy and dusky: the irides are dusky-brown: the inside of the beak and the legs are livid-red.

This species is common on the shores of the northern ocean, especially on those of Greenland, Iceland, Spitzbergen, and Norway: they are also abundant in the Hebrides and the Ferroe islands, and on the Fern islands, near the coast of Northumberland, but on more southern coasts they are less frequent: the nest is formed in the deep crevices of the rocks which overhang the sea; and the female lays a single egg, of a bright ash, or white ground, marked with small black and ash-coloured spots, which approach very near together at each end.

In the collection of indigenous birds preserved in the British Museum, this species is separated, by my friend Dr. Leach, from the Guillemots by the appellation of *Grylle scapularis;* but, although I am a strenuous advocate for generic division, I do not deem its characters of sufficient importance to warrant such separation; in which proceeding I suspect he was influenced by Cuvier in his Règne Animal, who has apparently confounded this bird with the Mergulus melanoleucos, and given the characters of it to his subgenus *Cephus.*

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